PART A

IONOSPHERIC DATA

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U. S. DEPARTMENT OF COMMERCE
NATIONAL BUREAU OF STANDARDS
CENTRAL RADIO PROPAGATION LABORATORY
BOULDER, COLORADO

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CONTENTS

SYMBOLS, TERMINOLOGY, CONVENTIONS

Beginning with data reported for January 1952, and continuing through December 1956, the symbols, terminology, and conventions for the determination of median values used in this report (CRPL-F series) conform as far as practicable to those adopted at the Sixth Meeting of the International Radio Consultative Committee (C.C.I.R.) in Geneva, 1951. Excerpts concerning symbols and terminology from Document No. 626-E of this Meeting are given on pages 2-7 of the report CRPL-F89, "Ionospheric Data," issued January 1952. Reprints of these pages are available upon request.

Beginning with data for January 1957, the symbols used are given in NBS Report 5033, "Summary of Changes in Ionospheric Vertical Soundings, Observing and Scaling Procedures - Effective 1 January 1957," which draws upon the First Report of the Special Committee on World-Wide Ionospheric Soundings (URSI/AGI), Brussels, Sept. 2, 1956. A list of these symbols is available upon request.

In the Second Report of the Special Committee on World-Wide Ionospheric Soundings of the URSI/AGI Committee, May 1957, a new descriptive letter was introduced:

M Measurement questionable because the ordinary and extraordinary components are not distinguishable.

There was an expansion in meaning of the following:

Z (1) (qualifying letter) Measurement deduced from the third magnetoionic component.
(2) (descriptive letter) Third magnetoionic component present.

Beginning with data for January 1945, median values are published wherever possible. Where averages are reported, they are, at any hour, the average for all the days during the month for which numerical data exist.

The following conventions are used in determining the medians for hours when no measured values are given because of equipment limitations and ionospheric irregularities. Symbols used are those given above.

a. For all ionospheric characteristics:

Values missing because of A, C, F, H, L, N or R are omitted from the median count.

b. For critical frequencies and virtual heights:

Values of foF2 (and foE near sunrise and sunset) missing because of E are counted as equal to or less than the lower limit of the recorder. Values of h'F (and h'E near sunrise and sunset) missing for this reason are counted usually as equal to or greater than the median. Other characteristics missing because of E are omitted from the median count.

Values missing because of G are counted:

1. For foF2, as equal to or less than foF1.
2. For h'F2, as equal to or greater than the median.

The symbol W is included in the median count only when it replaces a height characteristic; the descriptive symbol D, only when it replaces a frequency characteristic.

Values missing for any other reason are omitted from the median count.

c. For MUF factor (M-factors):

Values missing because of G or W are counted as equal to or less than the median.

Values missing for any other reason are omitted from the median count.

d. For sporadic E (Es):

Values of fEs missing because of E or G are counted as equal to or less than the median foE, or equal to or less than the lower frequency limit of the recorder.

B for fEs is counted on the low side when there is a numerical value of a higher layer characteristic; otherwise it is omitted from the median count.

S for fEs is counted on the low side at night; during the day it is omitted from the median count (beginning with data for November 1957).

Values of fEs missing for any other reason, and values of h'Es missing for any reason at all are omitted from the median count.

Beginning with CRPL-F188, Part A, issued April 1960, the count is given for foF2 in the tables of medians. It is regretted that space limitations prevent including detailed counts for other characteristics.

To indicate further in a general manner the relative reliability of the data, for the F2 layer, h'F or foEs, if the count is from five to nine, or, for all layers, if more than half of the data used to compute the medians are doubtful (either doubtful or interpolated), the median is enclosed in parentheses. Medians are computed for less than five values for foF2 only.

Ordinarily, a blank space in the fEs or foEs column of a table is the result of the fact that a majority of the readings for the month are below the lower limit of the recorder or less than the corresponding values of foE. Blank spaces at the beginning and end of columns of h'F2 or h'F1, foF1, h'E, and foE are usually the result of diurnal variation in these characteristics. Complete absence of medians of h'F1 and foF1 is usually the result of seasonal effects.

There is no indication on the graphs of the relative reliability of the observed data; it is necessary to consult the tables for such information.

The tables may contain median values of either foEs or fEs. The graph of median Es corresponds to the table. Percentage curves of fEs are estimated from values of foEs when necessary.

The latest available information follows concerning the smoothed observed Zürich numbers beginning with the minimum of April 1954. Final numbers are listed through June 1959.

Smoothed Observed Sunspot Number

Month	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1954				3	4	4	5	7	8	8	9	12
1955	14	16	19	23	29	35	40	46	55	64	73	81
1956	89	98	109	119	127	137	146	150	151	156	160	164
1957	170	172	174	181	186	188	191	194	197	200	201	200
1958	199	201	201	197	191	187	185	185	184	182	181	180
1959	179	177	174	169	165	161	156	151	145	140	136	132
1960	128	124										

WORLD-WIDE SOURCES OF IONOSPHERIC DATA

The ionospheric data given here in tables 1 to 72 and figures 1 to 144 were assembled by the Central Radio Propagation Laboratory for analysis and correlation, incidental to CRPL prediction of radio propagation conditions. The data are median values unless otherwise indicated. The following are the sources of the data in this issue:

Republica Argentina, Ministerio de Marina:
Trelew, Argentina
Ushuaia, Argentina

Meteorological Service, Province of Macau, Asia:
Macau

Commonwealth of Australia, Ionospheric Prediction Service of the Commonwealth Observatory:
Canberra, Australia

Meteorological Service of the Belgian Congo and Ruanda-Urundi:
Bunia, Belgian Congo
Elisabethville, Belgian Congo
Leopoldville, Belgian Congo

Belgian Royal Meteorological Institute:
Dourbes, Belgium

Universidad Mayor de San Andres:
La Paz, Bolivia

Electronics Directorate of the Brazilian Navy:
Natal, Brazil

Escola Politecnica, University of Sao Paulo:
Sao Paulo, Brazil

British Department of Scientific and Industrial Research, Radio Research Board:
Falkland Is.

Defence Research Board, Canada:
Eureka, Canada
Meanook, Canada
Ottawa, Canada
Resolute Bay, Canada
Winnipeg, Canada
Yellowknife, Canada

Radio Wave Research Laboratories, National Taiwan University, Taipeh, Formosa, China:
Formosa, China

General Direction of Posts and Telegraphs, Helsinki, Finland:
Nurmijarvi, Finland

The Finnish Academy of Sciences and Letters:
Sodankyla, Finland

French National Center for Telecommunications Studies:
Dakar, French West Africa
Djibouti, French Somaliland
Rabat, Morocco
Tahiti, Society Is.
Tamanrasset, French West Africa
Tananarive, Madagascar

Heinrich Hertz Institute, German Academy of Sciences, Berlin:
Juliusruh/Rügen, Germany

Institute for Ionospheric Research, Lindau Uber Northeim, Hannover, Germany:
Lindau/Harz, Germany

Ionospheric Institute, Breisach, Germany:
Freiburg, Germany

The Royal Netherlands Meteorological Institute:
De Bilt, Holland
Paramaribo, Surinam

Central Institute of Meteorology, Budapest, Hungary:
Budapest, Hungary

Geophysical and Geodetic Institute, Genoa, Italy:
Genoa (Monte Capellino), Italy

National Institute of Geophysics, City University, Rome, Italy:
Rome, Italy

Ministry of Postal Services, Radio Research Laboratories, Tokyo, Japan:
Akita, Japan
Tokyo (Kokubunji), Japan
Wakkanai, Japan
Yamagawa, Japan

General Directorate of Telecommunications, Mexico:
El Cerillo, Mexico

Norwegian Defence Research Establishment, Kjeller per Lillestrom, Norway:
Tromso, Norway

Research Institute of National Defence, Stockholm, Sweden:
Kiruna, Sweden
Upsala, Sweden

Royal Board of Swedish Telegraphs, Radio Department, Stockholm, Sweden:
Lulea, Sweden

Post, Telephone and Telegraph Administration, Berne, Switzerland:
Sottens, Switzerland

United States Army Signal Corps:
Ft. Monmouth, New Jersey
Grand Bahama I.
Thule, Greenland
White Sands, New Mexico

National Bureau of Standards (Central Radio Propagation Laboratory):
Boulder, Colorado
Byrd Station, Antarctica
Huancayo, Peru (Instituto Geofisico de Huancayo)
Pole Station, Antarctica
Talara, Peru (Instituto Geofisico de Huancayo)

TABULATIONS OF ELECTRON DENSITY DATA

Reduction of hourly ionospheric vertical soundings to electron density profiles has become a part of the systematic ionospheric data program of the Central Radio Propagation Laboratory, National Bureau of Standards. Scalings of ionograms for this purpose are being provided by ionosphere stations operated by CRPL and the U. S. Army Signal Corps. For the present, the hourly profile data from one CRPL station, Puerto Rico, are appearing in the monthly CRPL-F Reports, Part A. These data are in place of the standard ionogram reductions formerly provided by this Station. The very considerable task of scaling the ionograms for this purpose is being undertaken by T. R. Gilliland, Engineer in Charge, Puerto Rico Ionosphere Sounding Station; the computations are performed at the NBS Boulder Laboratories by a group headed by J. W. Wright. Basic conversion of virtual to true heights uses the well-known matrix method developed by K. G. Budden of the Cavendish Laboratory, Cambridge University, programmed for an IBM 704 computer.

The tabulations provide the following basic electron density profile data for each hour of each day of the month:

Quantity	Units	Remarks
Electron Density (N)	$x10^3$ = electrons/cm^3	Body of table; given at each 10 km of height.
NMAX	$x10^3$ = electrons/cm^3	Always the highest value of N at each hour. To maintain this rule, the electron density at the next 10 km increment above HMAX is always given as exactly equal to NMAX (unless HMAX coincides with a 10 km level).
QUALification	(Alphabetic)	A standard scaling letter qualifying the observation when necessary.
HMIN	Kilometers	The height of zero or very low electron density, obtained by linear extrapolation of the electron density vs. height curve.
SCAT	Kilometers	One half of the half-thickness of the parabola best fitting the upper portion of the F region profile. Approximates the scale height near the level HMAX.
HMAX	Kilometers	The height of maximum electron density, determined by fitting a parabola to the upper portion of the profile.
SHMAX	$x10^{10}$ = electrons/cm^2 column.	Obtained by integration of the profile between the limits HMIN and HMAX.

Tabulations of the average electron densities each hour, at each 10 km level, for the quiet ionosphere, are also given. These averages include the profiles obtained when the magnetic character figure Kp is less than 4+. The number of profiles entering the average for each hour is given by CNT. The other parameters of the layer, HMIN, SCAT, HMAX, SHMAX, are averaged in a similar way.

Before the averaging process, the individual profiles are extrapolated above HMAX by a Chapman distribution of 100 km scale height. This assumed model seems to agree well with the few published measurements dealing with the topside profile of the F-region.* Extrapolation is necessary in order to calculate homogeneous averages near HMAX and the average profiles are, in fact, given up to 950 km. Also given are the average estimated integrated electron densities to infinity, SHINF (same units as SHMAX); this is an approximation to the total electron content in a column of the ionosphere.

*See Wright,J.W. "A Model of the F-Region Above HMAX F2" J.Geophys.Res. V.65 pp 185-191.

ELECTRON DENSITY

PUERTO RICO 60 W 1 MAY 1960

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
QUAL			A	A	A	A			A	A		A
HMIN	256	222	178				262	107			110	111
SCAT	53.4	33.0	34.7				36.9	109			71.6	7[illegible].2
HMAXF	355	287	243				343	352			[illegible]16	3[illegible]1
SHMAX	316	190	58				83	408			690	700
KM												
360	477							262				
350	476						161	262				
340	468						160	262				
330	451						156	260				492
320	42[illegible]						145	257			[illegible]24	492
310	39[illegible]						129	252			[illegible]23	489
300	348						10[illegible]	247			[illegible]18	482
290	276	461					78.8	241			[illegible]07	468
280	190	457					[illegible]4.9	227			4[illegible]0	452
270	106	43[illegible]					3[illegible].7	213			472	430
260	4[illegible].[illegible]	38[illegible]						199			446	405
250		310	127					19[illegible]			413	379
240		17	127					18[illegible]			377	356
230		64.0	122					179			344	335
220			11[illegible]					170			31[illegible]	322
210			9[illegible].[illegible]					161			300	309
200			77.9					146			286	303
190			49.6					128			278	297
180			12.4					107			271	291
170								89.3			264	286
160								75.[illegible]			249	265
150								71.[illegible]			229	236
140								68.[illegible]			200	2[illegible]
130								65.4			175	1[illegible]1
120								62.6			161	179
110								56.1			1[illegible].4	

ELECTRON DENSITY

PUERTO RICO 6[illegible] W 1 MAY 196[illegible]

TIME	1[illegible]00	13[illegible]	140[illegible]	1[illegible]	[illegible]	17[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
QUAL	[illegible]			A			A					
HMIN	11[illegible]	1[illegible]	11				[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
SCAT	77.[illegible]	6[illegible]	[illegible]				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HMAXF	[illegible]4[illegible]	[illegible]7	[illegible]				44[illegible]		[illegible]	[illegible]6	[illegible]	[illegible]
SHMAX	814	[illegible]7[illegible]	[illegible]				[illegible]	[illegible]7	[illegible]	75[illegible]	[illegible]	[illegible]
KM												
390									[illegible]			10[illegible]
380									[illegible]		1[illegible]1	1[illegible]
370								814	8[illegible]	[illegible]	1061	1[illegible]
360								81[illegible]	8[illegible]	[illegible]	1[illegible]	1[illegible]
350	51[illegible]						[illegible]70	80[illegible]	7[illegible]	[illegible]	1[illegible]	[illegible]
340	516						[illegible]	78[illegible]	[illegible]	[illegible]17	[illegible]76	46
330	1[illegible]	[illegible]4[illegible]					[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]8
320	[illegible]0[illegible]	[illegible]4	[illegible]				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]49
310	491	63[illegible]	[illegible]				[illegible]17	684	[illegible]	744	[illegible]	6[illegible]
300	477	[illegible]1[illegible]	[illegible]4[illegible]				[illegible]	[illegible]	4[illegible]	[illegible]	[illegible]	7[illegible]
290	45[illegible]	[illegible]	[illegible]					[illegible]	[illegible]	[illegible]	[illegible]	[illegible]17
280	427	[illegible]61	7[illegible]				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]1
270	404	[illegible]	74[illegible]				[illegible]	[illegible]			[illegible]	[illegible]1
260	[illegible]8[illegible]	[illegible]	[illegible]				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
250	[illegible]6[illegible]	44[illegible]	[illegible]				[illegible]	[illegible]	[illegible]	1[illegible]1	[illegible]	
240	[illegible]	4[illegible]	[illegible]				1[illegible]	[illegible]	[illegible]	[illegible]	1[illegible]	
230	[illegible]4[illegible]	[illegible]	44[illegible]				[illegible]			[illegible].1		
220	[illegible]3[illegible]	[illegible]	[illegible]				[illegible]			[illegible].4		
210	328	[illegible]5[illegible]	354							[illegible].5		
200	[illegible]21	[illegible]44	333									
190	31[illegible]	[illegible]	323									
180	[illegible]0[illegible]	[illegible]	31[illegible]									
170	[illegible]9[illegible]	[illegible]1[illegible]	[illegible]6									
160	8[illegible]	[illegible]	[illegible]7[illegible]									
150	[illegible]67	[illegible]	[illegible]									
140	[illegible]37	[illegible]	[illegible]									
130	20[illegible]	[illegible]0	1[illegible]									
120	18[illegible]	18[illegible]	1[illegible]									
110	4[illegible]	14	4[illegible]									

ELECTRON DENSITY

PUERTO RICO 60 W 2 MAY 1960

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
QUAL	F		F	F				A				
HMIN	21[illegible]	234	24[illegible]	219	23[illegible]	[illegible]24	[illegible]26	10[illegible]	1[illegible]	108	10[illegible]	1[illegible]9
SCAT	4[illegible].	56.[illegible]	5[illegible].[illegible]	[illegible]	58.[illegible]	[illegible]	1.[illegible]	[illegible]6.4	[illegible]	[illegible]	[illegible]	[illegible].6
HMAXF	331	353	36[illegible]	345	35[illegible]	30[illegible]	314	[illegible]87	[illegible]01	[illegible]24	[illegible]1	336
SHMAX	551	67[illegible]	535	476	514	317	[illegible]75	62[illegible]	[illegible]	1480	14[illegible]7	1717
KM												
370			735									
360		90[illegible]	734		688							
350		906	722	652	685							
340	87[illegible]	894	698	650	67[illegible]							1612
330	875	868	662	638	64[illegible]					[illegible]16	1341	1608
320	863	828	616	614	61[illegible]		599			315	1341	1583
310	834	77[illegible]	552	573	573	616	598		1004	[illegible]404	134[illegible]	15[illegible]
300	785	707	469	527	517	613	588		1004	1[illegible]80	1310	1456
290	716	623	362	477	438	5[illegible]	[illegible]67	670	[illegible]	[illegible]245	1274	13[illegible]
280	61[illegible]	515	24[illegible]	411	435	[illegible]0	[illegible]40	668	[illegible]	1[illegible]1	1[illegible]1	1[illegible]48
270	477	378	156	335	240	487	4[illegible]	[illegible]	[illegible]	1135	1156	1131
260	310	219	88.3	240	127	400	431	641	90[illegible]	106[illegible]	1081	1004
250	179	11[illegible]	42.8	152	71.4	286	335	619	8[illegible]	978	[illegible]	875
240	104	4[illegible].6		86.[illegible]	3[illegible].1	161	1[illegible]8	590	787	881	8[illegible]3	754
230	56.0			49.6		60.0	[illegible]0.[illegible]	545	704	779	794	643
220	5.5			6.[illegible]				485	608	679	679	551
210								417	505	573	578	4[illegible]5
200								342	417	477	49[illegible]	436
190								262	32[illegible]	401	424	399
180								201	27[illegible]	341	370	368
170								155	2[illegible]3	294	3[illegible]9	340
160								123	183	255	2[illegible]7	312
150								101	151	216	267	280
140								88.5	12[illegible]	181	232	246
130								80.3	10[illegible]	154	194	217
120								74.1	103	136	169	18[illegible]
110								52.3	83.8	112	127	[illegible]7.[illegible]

ELECTRON DENSITY

PUERTO RICO 6[illegible] [illegible]

TIME	1[illegible]00	13[illegible]	14[illegible]	1[illegible]	16[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
QUAL			[illegible]			A	A					
HMIN	10	11[illegible]	110	10[illegible]	10[illegible]	110		[illegible]		[illegible]		[illegible]
SCAT	8[illegible].	[illegible]	[illegible]	[illegible]	[illegible]	1.		[illegible]	[illegible]	[illegible]	44.[illegible]	[illegible]
HMAXF	366	[illegible]	[illegible]3	4[illegible]	[illegible]	[illegible]0		[illegible]		[illegible]		[illegible]
SHMAX	2[illegible]	[illegible]	1[illegible]1	[illegible]	[illegible]	1[illegible]0		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
KM												
390										[illegible]		[illegible]
380									1[illegible]	[illegible]70	273	1[illegible]
370	203								[illegible]	[illegible]	[illegible]	1[illegible]
360	[illegible]2								1[illegible]	[illegible]	[illegible]	[illegible]
350	[illegible]01	1[illegible]		[illegible]					1[illegible]	[illegible]	[illegible]	[illegible]
340	1[illegible]8	[illegible]	[illegible]	[illegible]	1[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
330	1[illegible]	[illegible]	[illegible]	[illegible]				[illegible]		[illegible]	[illegible]	[illegible]
320	137[illegible]	1[illegible]		1[illegible]	[illegible]	[illegible]				[illegible]	4[illegible]	51[illegible]
310	180[illegible]	1[illegible]	1[illegible]	1[illegible]	[illegible]	1[illegible]			[illegible]	[illegible]	[illegible]	47[illegible]
300	1[illegible]1		[illegible]	[illegible]	[illegible]					[illegible]		[illegible]
290	160[illegible]	1[illegible]	1[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	1[illegible]	1[illegible]
280	146[illegible]	1[illegible]	1[illegible]	[illegible]4[illegible]	[illegible]	1[illegible]			[illegible]	[illegible]	1.[illegible]	[illegible].4
270	1[illegible]0.	[illegible]	1[illegible]	[illegible]31	[illegible]	1[illegible]		[illegible]		[illegible]	[illegible]	[illegible]
260	114[illegible]	[illegible]	1[illegible]	11[illegible]	[illegible]	14[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	
250	[illegible]60	1[illegible]	1[illegible]	[illegible]	11[illegible]	11[illegible]		[illegible]	[illegible]	[illegible]		
240	78[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		[illegible]		
230	64		[illegible]	[illegible]	[illegible]	[illegible]				[illegible]		
220	[illegible]3.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]		
210	46[illegible]	[illegible]	498	4[illegible]	[illegible]	[illegible]		1[illegible]	[illegible].			
200	40	[illegible]	43[illegible]	4[illegible]	[illegible]	[illegible]		[illegible].[illegible]	[illegible].			
190	371	4[illegible]	[illegible]8[illegible]	391	[illegible]	23[illegible]						
180	[illegible]4	[illegible]	[illegible]	344	[illegible]	[illegible]1						
170	[illegible]1	[illegible]	[illegible]	31[illegible]	[illegible]	[illegible]						
160	[illegible]8	[illegible]	[illegible]	281	[illegible]	4[illegible]						
150	[illegible]4[illegible]	[illegible]	6[illegible]	[illegible]0	1[illegible]	1[illegible]4						
140	1	[illegible]	[illegible]	[illegible]1[illegible]	[illegible]	1[illegible]						
130	19[illegible]	1	[illegible]	183	14	1[illegible]6						
120	18[illegible]	[illegible]	18[illegible]	168	13[illegible]	[illegible].9						
110	14	4[illegible]	[illegible]	127	[illegible]	1[illegible].4						

ELECTRON DENSITY

PUERTO RICO 60 W 3 MAY 1960

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
QUAL								A				
HMIN	[illegible]	[illegible]	[illegible]	240	21	226	239	110	[illegible]	110	111	110
SCAT	51.7	[illegible]	[illegible]	50.0	[illegible]	[illegible]	[illegible]	[illegible]	60.7	77.6	62.6	69.1
HMAXF	368	352	348	354	36	[illegible]	[illegible]	302	[illegible]	347	329	336
SHMAX	651	542	464	433	477	411	365	679	776	1426	1598	1740
KM												
370	760				59							
360	55	875		634	595	599						
350	831	874	716	633	594	595				1096		
340	890	655	712	622	577	58				1093		1583
330	834	817	693	598	554	559	599			1082	1555	1580
320	748	758	659	561	520	525	549			1062	1548	1561
310	635	674	612	514	477	484	570	643		1031	1521	1526
300	508	565	545	446	422	427	571	643	834	994	1474	1474
290	351	431	459	366	354	352	544	639	834	945	1407	1403
280	198	284	362	281	282	273	503	629	828	888	1330	1319
270	112	168	228	198	214	198	439	614	811	824	1223	1212
260	[illegible]	92.7	113	117	151	135	341	594	782	754	1085	1096
250	[illegible]	[illegible]	[illegible]	55.7	101	86.7	178	570	747	689	935	945
240		5.5	4.		56.4	55.7	[illegible]	635	673	625	785	794
230					44.0	23.0		495	621	565	643	654
220					[illegible]			446	534	514	534	535
210								389	446	471	452	453
200								323	369	432	394	405
190								256	306	392	354	374
180								198	258	347	324	350
170								157	219	296	297	324
160								126	183	250	272	293
150								107	153	211	244	247
140								93.6	131	179	208	209
130								83.2	111	159	177	193
120								75.3	103	146	165	184
110								17.4	49.6	49.6		71.4

ELECTRON DENSITY

PUERTO RICO 60 W 3 MAY 1960

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
QUAL				C			A					
HMIN	108	110			109	110	199	224	199	240	262	257
SCAT	71.5	60.			60.	70.4	67.0	60.9	76.7	47.0	52.9	59.5
HMAXF	350	33			320	330	364	347	3 4	385	393	398
SHMAX	2070	184			1534	1457	1330	968	1127	758	814	829
KM												
400									1072		1096	1038
390									1072	1050	1095	1034
380									1063	1047	1079	1015
370							1446		1046	1024	1044	982
360	1786						1445		1019	972	989	935
350	1786						1430	1240	983	903	917	875
340	1777	1801				1367	1400	1236	940	820	824	794
330	1752	179			1555	1367	1353	1216	885	716	716	687
320	1709	1779			1555	1360	1290	1180	870	608	589	566
310	1648	1734			1545	1338	1209	1125	742	488	455	431
300	1570	1663			1513	1303	1117	1057	653	362	320	302
290	1475	1570			1461	1255	1004	967	556	252	198	193
280	1365	1446			1379	1189	861	948	459	169	97.2	112
270	1230	1310			1277	1116	707	706	362	112	49.6	60.0
260	1071	1155			1171	1024	540	549	267	71.4		19.3
250	917	976			1050	917	389	335	179	45.5		
240	779	811			903	784	286	179	124			
230	649	670			754	643	198	60.0	88.3			
220	550	565			625	525	127		61.7			
210	483	48			508	430	71.4		42.			
200	434	434			417	362	12.4		4.1			
190	396	395			352	305						
180	366	364			310	262						
170	337	335			277	228						
160	308	307			246	198						
150	278	278			216	172						
140	245	24			179	147						
130	216	217			158	127						
120	202	199			147	116						
110	134	4 .			60.0	40.						

ELECTRON DENSITY

PUERTO RICO 60 W 4 MAY 1960

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
QUAL										A	A	A
HMIN	5	244	[illegible]	232	241	251	228	110	110	110	109	
SCAT	54.6	56.9	58.0	51.2	43.1	43.8	61.9	62.2	52.7	87.5	71.9	
HMAXF	47	364	351	353	[illegible]	351	407	272	[illegible]	335	346	
SHMAX	719	695	603	493	40	365	346	670	6 7	1196	1434	
KM												
380	170											
370	998	60										
360	975	95	814	707	616	608						
350	34	4	813	706	614	608					1167	
340	583	915	806	695	59	598				885	1165	
330	794	7	730	671	573	572				885	1153	
320	681	2	754	632	520	531				879	1130	
310	26	74	713	583	477	477	716			868	1076	
300	42	3	654	51	40	400	1			851	1050	
290	286	49	57	427	310	310	638			827	991	
280	14	3	468	335	21	219	646	814	804	728	925	
270	81.1	9	348	236	13	123	0	813	7 3	765	849	
260	4 .	47.	226	143	7 .	60.0	446	606	776	725	765	
250		47.0	120	83.8	4 .		1	757	742	679	685	
240			55.7	44.			[illegible]	759	6 7	634	608	
230								722	630	585	540	
220								673	545	534	477	
210								597	446	482	428	
200								485	362	432	385	
190								335	315	384	347	
180								219	280	335	313	
170								167	247	292	286	
160								136	211	257	255	
150								112	175	225	226	
140								97.2	143	191	198	
130								91.2	125	165	178	
120								85.3	117	150	167	
110								12.4	49.6	40.2	60.0	

ELECTRON DENSITY

PUERTO RICO 60 W 4 MAY 1960

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
QUAL	A				A	A	A					
HMIN	108	110		109			200	198	237	230	235	226
SCAT	66.6	69.4		67.3			62.9	64.2	55.1	50.	55.7	43.0
HMAXF	347	347		341			348	366	371	365	383	355
SHMAX	1938	2041		1963			1123	1087	942	841	928	706
KM												
390											1143	
380									1240		1142	
370								1191	1240	1143	1129	
360								1189	1227	1140	1099	1096
350	1741	1815		1876			1341	1173	1174	1119	1053	1093
340	1736	1810		1876			1335	1144	1143	1074	988	1064
330	1712	1787		1863			1313	1099	1065	1009	910	1004
320	1669	1745		1826			1273	1043	972	925	812	917
310	1606	1685		1766			1213	968	851	821	694	812
300	1522	1608		1682			1143	875	716	702	573	690
290	1424	1517		1576			1050	768	573	573	432	540
280	1297	1392		1446			941	661	417	435	293	389
270	1143	1240		1292			812	556	262	310	185	250
260	1004	1083		1132			660	446	135	187	108	154
250	854	917		960			477	341	66.	102	64.5	97.2
240	716	765		734			262	233	20.	54.8	31.4	60.0
230	603	63		643			149	147				24.6
220	508	521		527			97.2	90.0				
210	446	45		446			51.9	53.1				
200	391	412		394				12.4				
190	36	382		356								
180	34	357		328								
170	32	333		304								
160	300	308		283								
150	268	281		259								
140	237	251		232								
130	216	223		205								
120	203	205		186								
110	127	60.		127								

ELECTRON DENSITY

PUERTO RICO 60 W 5 MAY 1960

TIME	0100	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
QUAL							A	A	A	A	A	A
HMIN	25	48	234	232	227	176						108
SCAT	62.2	67.	48.6	76.2	75.1	64.2						77.6
HMAXF	395	390	346	390	361	333						359
SHMAX	924	917	608	830	796	481						1881
KM												
400	1131	1084		854								
390	1129	1084		854								
380	1115	1079		851								
370	1086	1061		840	896							
360	104	1032		822	896							1473
350	986	991	939	797	891							1468
340	912	943	935	765	879	540						1450
330	813	875	914	727	859	538						1421
320	696	775	872	679	831	531						1379
310	559	658	810	614	796	518						1321
300	417	514	727	536	754	499						1250
290	262	363	618	446	692	475						173
280	143	207	488	335	595	448						.089
270	76.4	111	335	225	477	412						993
260	42.1	60.0	179	131	350	362						890
250		12.4	83.8	74.6	198	300						785
240			40.3	43.8	93.4	230						686
230					33.1	153						595
220						97.2						517
210						57.8						454
200						23.7						408
190												375
180												346
170												318
160												288
150												257
140												224
130												200
120												188
110												161

ELECTRON DENSITY

PUERTO RICO 60 W 5 MAY 1960

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
QUAL	A		A	A		A	A	A	A			
HMIN			10		11		188	217	[illegible]	211	268	274
SCAT			[illegible]		66.		[illegible]	[illegible]	[illegible]	71.1	[illegible]	64.2
HMAXF			31		337		345	348	[illegible]	364	387	401
SHMAX			2074		1748		1168	1253	1276	1146	760	784
KM												
410												1061
400												1061
390											1084	1051
380											1080	1022
370									1636	1215	1056	976
360									1670	1215	1011	913
350							1528	1612	1543	1205	942	827
340			2161		1640		1524	1603	1544	1183	857	724
330			161		1635		1476	1572	1474	1149	754	600
320			2143		1614		1437	1518	1382	1103	629	458
310			2096		157		1450	1440	[illegible]	1050	477	326
300			2118		1507		1340	1341	1143	976	335	198
290			1907		1434		1114	1217	948	885	189	97.2
280			1775		1341		960	1061	718	784	83.8	47.4
270			1601		1272		772	875	417	671	23.0	
260			1398		1104		573	643	340	548		
250			1157		960		417	389	112	417		
240			933		821		279	198	47.1	286		
230			74		686		187	83.8		143		
220			587		573		117	32.		62.1		
210			477		477		1.0					
200			411		39		49.6					
190			368		34		.4					
180			335		29							
170			311		267							
160			293		238							
150			67		210							
140			23.		176							
130			20		156							
120			185		143							
110			97.									

ELECTRON DENSITY

PUERTO RICO 60 W 6 MAY 1960

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
QUAL						A	A	A	A			B
HMIN	218	256	246	240	270	229	228	115	104	109	109	
SCAT	64.3	65.4	59.6	54.8	60.5	49.6	59.8	56.3	84.7	89.1	70.4	
HMAXF	360	377	380	367	395	438	369	302	362	367	360	
SHMAX	891	815	728	580	634	469	621	758	1327	1984	1822	
KM												
400					814							
390			917		811							
380		1027	917		800							
370	1096	1024	911	784	778		764		960	1460	1473	
360	1096	1010	892	780	743		759		960	1458	1473	
350	1089	983	860	764	700		744		956	1447	1466	
340	1069	945	814	735	643	707	718		944	1427	1444	
330	1036	899	754	693	565	703	681		926	1398	1407	
320	989	824	686	638	468	685	635		900	1359	1355	
310	932	735	599	566	354	652	573	906	868	1307	1283	
300	853	608	490	477	240	608	504	906	830	1249	1201	
290	739	460	362	374	127	544	417	897	789	1184	1109	
280	599	296	240	270	64.1	462	323	873	744	1113	1004	
270	427	117	133	171		368	230	834	698	1029	899	
260	286	45.	71.4	97.2		262	143	786	648	936	794	
250	166		27.5	51.6		138	88.8	716	587	834	701	
240	97.2					67.8	53.1	627	544	736	621	
230	56.7					12.4	12.4	523	41	638	559	
220	12.4							405	44	552	513	
210								310	392	482	477	
200								237	343	421	443	
190								179	227	368	405	
180								138	255	319	362	
170								112	216	283	310	
160								88.1	182	255	269	
150								75.9	153	223	233	
140								69.2	129	187	208	
130								65.2	112	159	19	
120								61.2	103	147	180	
110									83.8	97.2	127	

ELECTRON DENSITY

PUERTO RICO 60 W 6 MAY 1960

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
QUAL	P	?		A	A	A	A	A	A		A	A
HMIN		109	110				117	198		[illegible]		
SCAT		67.3	48.5				59.6	66.1		[illegible]		
HMAXF		351	330				347	368		424		
SHMAX		2732	2013				1895	1627		1123		
KM												
430										1050		
420										1049		
410										1041		
400										1024		
390										999		
380										965		
370								1315		923		
360		257						1809		871		
350		257					161	1783		807		
340		2551	2430				2153	1736		733		
330		2502	2430				2116	1669		652		
320		24 5	2407				2048	1583		562		
310		23 0	2331				1948	1475		466		
300		2183	2197				1823	1341		372		
290		2032	2037				669	1167		290		
280		1814	179				1463	960		213		
270		1555	1538				1230	754		150		
260		1300	1254				1004	573		107		
250		1 7	930				754	380		71.4		
240		375	716				529	240		49.6		
230		707	573				372	154		16.8		
220		59	482				273	93.5				
210		508	425				219	55.0				
200		455	379				179	12.4				
190		414	335				143					
180		381	286				114					
170		35	255				3.7					
160		322	236				91.3					
150		93	223				72.8					
140		264	214				68.2					
130		240	207				64.3					
120		226	199				60.5					
110		17	12.4									

ELECTRON DENSITY

PUERTO RICO 60 W 7 MAY 1960

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
QUAL	A	A			A							
HMIN		248	269	225	235	227	208	112	111	108	109	109
SCAT		55.4	52.5	52.5	65.3	67.4	64.8	61.2	82.0	81.1	61.7	59.1
HMAXF		382	380	334	399	373	358	319	344	365	342	342
SHMAX		734	756	719	702	712	781	1115	1647	2016	2077	2197
KM												
400					774							
390		982	1119		770							
380		985	1119		758	814						
370		971	1110		736	813				1555		
360		945	1080		704	806	917			1554		
350		901	1029		665	791	913		1393	1541	2000	2260
340		843	960	1096	616	763	899		1352	1517	2000	2259
330		767	865	1094	553	732	874		1383	1481	1982	2235
320		670	733	1076	481	692	837	1143	1363	1430	1938	2179
310		550	585	1038	404	637	794	1137	1333	1364	1868	2090
300		425	417	981	326	568	733	1116	1292	1291	1770	1971
290		297	179	904	250	477	654	1081	1240	1211	1645	1822
280		184	83.8	785	176	382	557	1028	1182	1125	1497	1628
270		106	12.4	619	117	278	446	960	1116	1029	1341	1396
260		60.0		428	80.4	179	321	884	1021	917	1143	1128
250		12.4		219	52.6	106	209	801	905	806	960	917
240				97.2	22.6	62.6	137	711	774	695	816	745
230				45.0		19.6	83.8	608	643	602	695	608
220							52.1	508	540	528	596	520
210							12.4	408	446	470	515	454
200								325	374	422	446	409
190								258	318	380	396	379
180								205	270	339	352	352
170								165	230	302	312	321
160								136	193	262	277	282
150								116	163	226	242	230
140								102	140	191	207	192
130								92.5	125	165	179	176
120								84.7	116	150	169	167
110										112	127	127

ELECTRON DENSITY

PUERTO RICO 60 W 7 MAY 1960

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
QUAL				A	A	A	A	A	A	A	A	A
HMIN	107	109	108				198					
SCAT	53.7	64.4	64.5				56.9					
HMAXF	344	344	337				348					
SHMAX	2277	2513	2307				1255					
KM												
350	2327	2413					1612					
340	2326	2411	2260				1604					
330	2290	238	2254				1573					
320	2215	2330	2222				1517					
310	2095	2240	2163				1435					
300	1939	2104	2076				1333					
290	1750	2003	1960				1200					
280	1543	1824	1820				1036					
270	1321	1626	1653				834					
260	1131	1411	1461				608					
250	948	1184	1253				403					
240	794	970	1066				262					
230	667	794	846				161					
220	573	655	658				94.5					
210	504	545	523				55.0					
200	453	470	439				12.4					
190	412	414	389									
180	377	373	352									
170	345	337	318									
160	315	307	280									
150	290	283	240									
140	258	256	211									
130	219	225	195									
120	194	204	186									
110	179	83.8	143									

ELECTRON DENSITY

PUERTO RICO 60 W 8 MAY 1960

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
QUAL	A					A			A		A	A
HMIN	235	249	257	340	338	272	316	116	107	109		109
SCAT	64.0	66.2	67.2	60.8	54.7	70.8	75.8	90.1	194	101		150
HMAXF	378	398	406	477	468	425	478	327	348	364		373
SHMAX	650	598	571	472	460	600	389	407	652	831		755
KM												
480				557			375					
470				555	593		374					
460				546	596		370					
450				528	583		363					
440				505	561		352					
430				473	527	643	338					
420				435	485	642	321					
410			643	389	433	635	301					
400		661	641	339	371	623	277		298			
390		658	634	282	302	603	249		248			
380	794	644	619	219	233	578	216		207			368
370	794	631	596	161	167	546	183		235	442		368
360	789	604	568	109	113	508	149		243	432		368
350	775	573	531	65.8	80.0	460	117		240	490		366
340	752	534	484		12.4	402	88.0		247	485		364
330	720	484	424			335	63.0	298	251	479		360
320	679	424	350			258	36.8	297	274	469		353
310	624	362	275			183		295	294	458		345
300	553	297	207			113		291	260	443		338
290	456	229	143			68.6		285	223	426		330
280	341	158	90.9			42.2		277	245	407		321
270	225	93.3	55.0					269	238	386		313
260	127	53.7	18.1					260	232	363		306
250	71.4	5.8						246	225	340		299
240	33.1							229	219	319		292
230								211	216	300		285
220								194	212	283		282
210								178	209	271		278
200								163	206	260		274
190								148	203	254		270
180								133	199	248		267
170								118	188	241		263
160								104	170	221		226
150								91.9	147	200		189
140								82.2	127	177		170
130								76.8	112	154		158
120								71.4	104	138		151
110									97.2	112		143

ELECTRON DENSITY

PUERTO RICO 60 W 8 MAY 1960

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
QUAL	A	A	A	A		A	A	A		A	A	A
HMIN		114	109	109	110	111		258	265	220	268	
SCAT		87.8	75.6	71.4	103	104		61.7	64.1	66.0	60.0	
HMAXF		371	340	280	298	346		390	404	368	408	
SHMAX		788	1105	613	577	708		546	643	590	472	
KM												
410									754		565	
400								679	754		562	
390								679	746		552	
380		590						675	728		533	
370		590						662	700	661	508	
360		588						639	665	658	477	
350		582	896			461		609	621	648	432	
340		572	896			461		569	566	631	380	
330		556	892			459		519	469	606	323	
320		540	880			454		455	417	573	262	
310		517	861			448		374	329	534	205	
300		493	841		417	439		286	235	483	143	
290		467	806	573	416	428		179	149	421	88.0	
280		439	754	573	414	415		107	80.9	355	53.1	
270		413	689	571	409	397		60.0	36.2	286	12.4	
260		389	614	563	403	379		12.4		211		
250		368	529	549	394	360				143		
240		349	446	530	383	340				86.6		
230		333	386	511	370	321				49.6		
220		321	355	480	357	300						
210		310	334	432	340	280						
200		304	317	369	322	258						
190		304	297	320	303	235						
180		307	271	280	283	211						
170		286	243	248	260	187						
160		272	224	219	234	163						
150		254	209	198	208	143						
140		237	197	183	181	124						
130		198	190	173	161	111						
120		180	183	165	141	103						
110			127	89.7	49.6							

ELECTRON DENSITY

PUERTO RICO 60 W 9 MAY 1960

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
QUAL						A	A	A	A		A	
HMIN	[illegible]	[illegible]	[illegible]	[illegible]	25[illegible]		219			114		108
SCAT	[illegible]	6[illegible]	[illegible]	[illegible]	[illegible]		[illegible]			107		74.[illegible]
HMAXF	[illegible]	[illegible]	40[illegible]	402	35[illegible]		30[illegible]			[illegible]00		361
SHMAX	[illegible]	[illegible]	[illegible]	374	[illegible]		[illegible]14			[illegible]08		[illegible]
KM												
410			33[illegible]	4[illegible]3								
400			33[illegible]	40[illegible]								
390	43	[illegible]	3[illegible]	4[illegible]								
380	431	[illegible]	31[illegible]	[illegible]								
370	42[illegible]	47[illegible]	30[illegible]	381						[illegible]4		1786
360	40[illegible]	[illegible]	[illegible]	366	41					[illegible]4		1786
350	[illegible]		[illegible]	[illegible]	[illegible]					[illegible]		1770
340	35[illegible]	[illegible]	[illegible]11	[illegible]	4[illegible]					[illegible]47		17[illegible]
330	[illegible]	31[illegible]	17[illegible]	[illegible]	[illegible]					[illegible]38		1708
320	[illegible]6	[illegible]	[illegible]1	[illegible]	3[illegible]					[illegible]4		64[illegible]
310	[illegible]19	[illegible]47	[illegible]	[illegible]1	[illegible]					[illegible]0		[illegible]79
300	16[illegible]		[illegible]	174	1[illegible]		[illegible]			[illegible]		4[illegible]
290	12[illegible]	[illegible]		1[illegible]7	[illegible]		[illegible]7			[illegible]		[illegible]3
280	[illegible]	[illegible]1		[illegible]	1		[illegible]			[illegible]		[illegible]
270	5[illegible]	6[illegible]		[illegible].7	[illegible]		[illegible]6			[illegible]1		[illegible]134
260	31.[illegible]	1[illegible]		1[illegible].4	1[illegible]		[illegible]7[illegible]			[illegible]		[illegible]
250							[illegible]			1[illegible]		[illegible]1
240							165			[illegible]63		[illegible]
230							112			1[illegible]		[illegible]
220							2.4			47[illegible]		4[illegible]
210										431		[illegible]1
200										[illegible]3		43[illegible]
190										[illegible]54		[illegible]
180										[illegible]14		[illegible]
170										[illegible]76		[illegible]41
160										[illegible]43		[illegible]13
150										[illegible]12		[illegible]
140										179		2[illegible]1
130										156		[illegible]22
120										141		19[illegible]
110												101

ELECTRON DENSITY

PUERTO RICO 60 W 9 MAY 1960

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
QUAL						A	A			[illegible]		F
HMIN		[illegible]	11[illegible]	109	10[illegible]	110		25[illegible]	224	239	23[illegible]	248
SCAT		6[illegible].	72.8	66.[illegible]	7[illegible].	[illegible].		[illegible].	[illegible].	[illegible]1.[illegible]	[illegible].	[illegible].
HMAXF		[illegible]	353	346	33[illegible]	[illegible]		[illegible]	[illegible]	2[illegible]7		42[illegible]
SHMAX		227[illegible]	2424	2138	1872	177[illegible]		[illegible]86	10[illegible]	710	[illegible]18	1101
KM												
430												1050
420												1049
410												1042
400												1026
390									1143			1002
380									1142			968
370									1129		1050	924
360		[illegible]	2128			1500		1240	1103	1143	1044	875
350		20[illegible]	2127	1969		1500		1235	10	1134	1024	812
340		206	2111	1965	1727	14[illegible]0		1211	1004	1096	988	744
330		20[illegible]	2076	1940	17[illegible]	1469		1167	938	[illegible]	935	671
320		1[illegible]50	20[illegible]	18[illegible]	170	14[illegible]7		1104	85[illegible]	917	868	591
310		1[illegible]	1944	1824	1663	1393		10[illegible]1	760	801	786	503
300		1[illegible]4	184[illegible]	1731	[illegible]6[illegible]	133		909	6	657	688	401
290		1[illegible]	1733	1621	153[illegible]	1[illegible]66		771	540	503	566	286
280		144	1[illegible]9[illegible]	1484	145[illegible]	1189		608	426	335	430	179
270		1[illegible]7	1434	1324	1341	1101		417	31[illegible]	198	272	106
260		1[illegible]4	125[illegible]	1160	120[illegible]	921		179	2[illegible]6	109	150	57.9
250		[illegible]17	1075	976	1050	875			118	57.3	71.4	12.[illegible]
240		[illegible]	891	810	89	743			68.9	4.9	20.7	
230		[illegible]4	7[illegible]	670	737	6[illegible]4			36.9			
220		[illegible]4	[illegible]99	560	59	[illegible]17						
210		4[illegible]	50[illegible]	483	487	417						
200		[illegible]	43[illegible]	430	40[illegible]	34[illegible]						
190		[illegible]	38[illegible]	38[illegible]	35[illegible]	277						
180		[illegible]	35[illegible]	352	310	228						
170		34	32[illegible]	320	27[illegible]	188						
160		31	298	29[illegible]	24[illegible]	153						
150		[illegible]8	[illegible]69	266	21[illegible]	1[illegible]7						
140		[illegible]5	238	233	187	109						
130		[illegible]	204	197	17	95.[illegible]						
120		[illegible]	187	183	15[illegible]	88.[illegible]						
110		161	71.4	97.[illegible]	97.[illegible]	40.[illegible]						

ELECTRON DENSITY

PUERTO RICO 60 W 10 MAY 1960

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
QUAL								A		A	A	A
HMIN	250	231	236	220	22[illegible]	228	239		110	106		
SCAT	49.8	55.7	58.6	58.7	54.[illegible]	50.8	50.9		79.5	72.8		
HMAXF	369	355	[illegible]	341	348	342	3[illegible]1		311	332		
SHMAX	765	700	654	550	411	375	339		907	1488		
KM												
370	1119											
360	1110	960	875									
350	1079	959	874	735	573	548						
340	1024	[illegible]44	961	735	570	549				1290		
330	949	913	836	729	558	540	565			1290		
320	852	867	798	713	535	522	565		7[illegible]4	1282		
310	737	804	749	685	506	493	559		794	1262		
300	585	725	684	649	464	455	542		7[illegible]0	1230		
290	417	609	596	602	403	401	516		779	1185		
280	253	477	477	534	335	345	479		763	1129		
270	127	347	349	446	24[illegible]	262	417		739	1063		
260	60.0	219	210	350	166	179	330		713	977		
250		112	97.[illegible]	205	97.[illegible]	97.[illegible]	206		679	875		
240		4[illegible].6	42.[illegible]	106	53.[illegible]	[illegible].5	40.2		634	780		
230				53.8	5.[illegible]	12.4			584	679		
220									526	587		
210									460	502		
200									394	432		
190									330	375		
180									272	329		
170									222	291		
160									179	254		
150									143	221		
140									120	183		
130									108	152		
120									102	138		
110									49.6	128		

ELECTRON DENSITY

PUERTO RICO 60 W 10 MAY 1960

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
QUAL	A					A	[illegible]					
HMIN	11	1[illegible]	108	10[illegible]	108		108	231	[illegible]	261	260	243
SCAT	6[illegible].	61.	68.	[illegible].4	64.		[illegible].0	7[illegible].6	[illegible]	[illegible].5	5[illegible].5	63.2
HMAXF	34	[illegible]	35	[illegible]	33[illegible]		[illegible]	[illegible]	[illegible]	407	386	392
SHMAX	17[illegible]	236[illegible]	250	240[illegible]	2191		[illegible]	143[illegible]	11[illegible]	1111	985	955
KM												
410									1[illegible]0	1441		
400									1248	1337		1131
390								1460	1[illegible]74	1317	1316	1131
380								1460	124[illegible]	1280	1312	1122
370								145[illegible]	1[illegible]01	12[illegible]4	1284	1098
360			2[illegible]60					1433	1143	1158	1244	1061
350	2096	2[illegible]	225[illegible]	[illegible]344			1[illegible]83	1401	1071	1066	1178	1010
340	2096	2[illegible]1	[illegible]24[illegible]	2344	216[illegible]		[illegible]	1358	981	942	1096	944
330	[illegible]08	2180	21[illegible]	[illegible]5	215[illegible]		1[illegible]7[illegible]	1302	875	794	982	856
320	2040	2[illegible]1	21[illegible]	2273	212[illegible]		1546	1243	754	634	844	754
310	196[illegible]	201[illegible]	2041	2204	206[illegible]		1502	1163	6[illegible]1	477	679	631
300	1865	1881	1923	2101	1984		1439	1060	487	310	508	497
290	1735	17[illegible]	1786	1977	1884		1360	926	35[illegible]	179	335	362
280	1581	155[illegible]	1617	1817	1759		1269	770	229	97.2	179	233
270	1417	138[illegible]	14[illegible]7	1614	1584		1153	591	13[illegible]	49.6	71.4	127
260	1240	1182	1220	1384	1391		1028	389	68.5			71.4
250	1059	[illegible]9	1018	1165	1192		993	209	1[illegible].4			41.7
240	483	[illegible]54	846	947	978		754	83.8				
230	740	716	70	754	794		600					
220	630	615	608	608	643		469					
210	546	542	535	501	529		356					
200	484	489	481	434	440		270					
190	436	444	438	389	375		206					
180	398	404	400	352	324		164					
170	364	365	364	322	28		134					
160	330	329	330	293	249		112					
150	29[illegible]	29[illegible]	298	262	21[illegible]		[illegible]6.4					
140	25[illegible]	264	266	232	191		94.9					
130	[illegible]27	233	23[illegible]	205	164		78.4					
120	[illegible]07	209	211	188	14[illegible]		72.4					
110		16[illegible]	161	127	127		49.6					

ELECTRON DENSITY

PUERTO RICO 60 W 11 MAY 1960

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
QUAL							H	A	A	A	A	A
HMIN	246	198	232	303	296	311	307					
SCAT	54.0	59.2	58.5	55.4	67.5	87.0	80.1					
HMAXF	363	332	351	439	438	477	514					
SHMAX	744	652	546	427	450	503	490					
KM												
520							410					
510							410					
500							407					
490							401					
480						532	392					
470						531	380					
460						524	366					
450						511	349					
440					540	492	327					
430					536	565	467	301				
420					524	542	438	271				
410					502	561	400	240				
400					473	530	354	204				
390					433	506	305	167				
380					389	467	256	135				
370	1050				335	417	202	111				
360	1048				275	362	154	97.2				
350	1034			716	215	303	112	87.2				
340	1001	814	710	155	240	80.5	75.3					
330	954	813	693	96.8	173	56.7	60.9					
320	885	805	665	64.3	116	37.4	44.2					
310	794	785	629	40.2	66.8		32.4					
300	672	754	579		26.8							
290	540	713	514									
280	362	656	431									
270	199	586	335									
260	88.8	508	240									
250	47.2	417	143									
240		323	71.4									
230		219										
220		112										
210		60.0										
200		12.6										

ELECTRON DENSITY

PUERTO RICO 60 W 11 MAY 1960

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
QUAL	A	A					E					S
HMIN			112	112	111	111	112	228	267	279	256	236
SCAT			115	75.7	70.0	77.2	69.9	66.0	69.4	60.6	68.8	59.0
HMAXF			350	338	311	313	328	363	446	432	430	396
SHMAX			849	800	649	622	550	326	422	459	533	481
KM												
450									417			
440									416	532		
430									412	532	565	
420									402	526	565	
410									390	514	562	
400									371	494	553	565
390									349	466	538	563
380									323	432	519	554
370								368	294	389	494	537
360			477					368	262	343	458	512
350			477					365	227	290	414	480
340			476	540				357	192	234	365	436
330			473	538			477	345	158	176	310	384
320			469	532	50	469	475	329	126	127	254	327
310			463	521	508	468	469	310	95.7	90.1	198	267
300			454	505	505	463	458	286	72.5	65.3	143	212
290			443	485	496	454	442	255	54.3	42.4	100	157
280			430	460	483	440	421	222	40.2	4.1	71.4	112
270			415	429	463	420	393	183	9.3		48.5	81.9
260			398	398	441	401	362	143			16.7	60.0
250			380	369	411	377	330	97.7				43.3
240			364	346	378	350	299	56.6				12.4
230			351	328	347	328	269	12.4				
220			339	315	321	305	238					
210			329	307	303	284	208					
200			321	301	289	265	179					
190			313	296	277	248	151					
180			305	290	265	232	127					
170			296	283	246	215	109					
160			288	265	223	197	96.7					
150			268	242	200	178	86.7					
140			244	219	183	158	80.8					
130			219	195	161	142	77.1					
120			200	182	140	132	73.5					

ELECTRON DENSITY

PUERTO RICO 60 W 12 MAY 1960

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
QUAL		F	A	A						A	B	B
HMIN	265	257	246	258	229	190	212	111	111			
SCAT	55.2	60.4	43.3	55.4	51.7	77.7	60.6	61.9	82.6			
HMAXF	390	387	354	385	347	336	326	287	336			
SHMAX	404	433	301	343	319	311	222	514	803			
KM												
400	532											
390	532	532		439								
380	529	529		438								
370	515	519		431								
360	494	502	477	416								
350	463	477	476	393	446							
340	426	443	464	366	444	310						
330	376	405	438	329	435	309	316		635			
320	319	358	400	288	417	307	315		634			
310	262	303	353	240	387	301	308		630			
300	193	240	298	196	354	293	296		610			
290	127	165	240	147	310	282	275	540	574			
280	71.4	101	179	97.2	257	268	250	530	577			
270	33.	60.0	117	56.9	198	253	219	530	563			
260		1.	66.5	10.4	143	235	182	515	534			
250			26.8		92.7	214	140	493	492			
240					57.5	180	97.3	466	459			
230					6.4	158	69.3	427	423			
220						121	37..	378	389			
210						93.8		324	350			
200						49.6		270	316			
190								222	282			
180								184	248			
170								155	215			
160								134	186			
150								114	161			
140								98.3	131			
130								81.3	121			
120								84.9	113			

ELECTRON DENSITY

PUERTO RICO 60 W 12 MAY 1960

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
QUAL	B	F	B		A	A	A	A	A			
HMIN				113	111	110		217	247	272	259	237
SCAT				71.6	67.2	73.6		76.1	72.3	58.3	48.9	53.9
HMAXF				370	365	361		383	415	409	379	366
SHMAX				1008	1883	1847		1321	1264	1130	974	971
KM												
420									1316			
410									1314	1420		
400									1302	1410		
390								1316	1277	1380		
380				1626				1315	1240	1330	1460	
370				1626	1640	1669		1306	1187	1258	1448	1354
360				1617	1638	1668		1284	1130	1166	1405	1350
350				1593	1620	1650		1254	1050	1050	1331	1324
340				1552	1584	1624		1207	960	910	1227	1275
330				14.3	1526	1594		1157	834	754	1096	1200
320				1428	1457	1537		1096	701	583	917	1108
310				1341	1367	1474		1010	573	408	716	982
300				1234	1261	1389		907	435	240	508	816
290				1137	1134	1280		794	295	127	310	626
280				1017	1004	1133		679	188	57.8	143	417
270				890	875	988		540	112		71.4	248
260				760	745	834		417	63.0		12.4	136
250				656	634	691		260	19.6			68.1
240				565	540	564		152				19.9
230				497	464	460		77.5				
220				446	413	379		29.1				
210				412	373	322						
200				385	342	277						
190				362	315	238						
180				339	290	201						
170				310	262	165						
160				268	230	135						
150				224	200	120						
140				202	183	111						
130				191	171	106						
120				181	162	101						
110						60.0						

ELECTRON DENSITY

PUERTO RICO 60 W 13 MAY 1960

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
QUAL								A				
HMIN	251	231	213	220	217	214	218	107	114	110	111	112
SCAT	61.0	58.6	50.7	65.7	67.3	43.5	48.0	68.8	52.1	69.3	87.6	74.0
HMAXF	380	356	320	361	351	323	305	290	270	307	351	367
SHMAX	1087	947	682	712	625	358	371	648	672	994	1486	2004
KM												
390	1393											
380	1393											
370	1384			834								1555
360	1357	1252		834	735						1072	1552
350	1310	1249		828	735						1072	1534
340	1245	1229		812	731						1068	1503
330	1166	1191	1072	786	718	582					1056	1457
320	1060	1134	1072	751	697	581					1038	1390
310	917	1063	1062	708	669	567	643			865	1012	1316
300	736	960	1031	652	636	540	641	661		862	979	1233
290	525	834	978	573	588	497	628	661		851	940	1133
280	310	679	907	484	523	442	601	658	844	831	973	1035
270	143	477	794	383	446	370	566	647	844	800	842	933
260	60.0	286	652	279	351	286	503	628	826	762	786	834
250		127	465	179	251	194	398	608	812	716	734	742
240		60.0	240	97.2	143	119	262	575	772	668	656	655
230			102	53.0	71.4	71.4	112	536	719	617	586	582
220			49.6		19.7	40.2	26.8	487	643	561	521	521
210								430	540	505	463	472
200								365	437	450	417	432
190								292	340	400	382	398
180								225	262	352	349	366
170								169	210	307	316	337
160								132	174	267	283	308
150								109	153	229	245	278
140								95.6	138	192	207	249
130								89.4	127	173	191	219
120								82.3	103	162	180	198
110								63.7		40.2		

ELECTRON DENSITY

PUERTO RICO 60 W 13 MAY 1960

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
QUAL					A	A	A		A	A		A
HMIN	109	112	110	[illegible]				207	264	273	261	251
SCAT	[illegible]	[illegible]	[illegible]	64.8				82.6	[illegible]	[illegible]	69.3	58.0
HMAXF	[illegible]	[illegible]	364	[illegible]				394	[illegible]	406	418	387
SHMAX	[illegible]	2347	2436	[illegible]				1576	[illegible]	1205	1531	1252
KM												
420									1528		1669	
410									1528	1569	1663	
400								1420	1516	1564	1641	
390								1419	1487	1526	1602	1640
380								1410	1438	1476	1545	1634
370	1921	[illegible]	2227					1390	1373	1406	1471	1605
360	[illegible]	[illegible]	[illegible]	[illegible]				1360	[illegible]	1300	1381	1551
350	[illegible]	[illegible]	[illegible]	[illegible]				1315	[illegible]	1176	1273	1473
340	1881	[illegible]	[illegible]	[illegible]				1261	[illegible]	1027	1143	1376
330	[illegible]	[illegible]	2038	[illegible]				[illegible]	[illegible]	845	980	1240
320	1757	[illegible]	[illegible]	[illegible]				1136	[illegible]	643	794	1067
310	1669	[illegible]	[illegible]	2067				1054	[illegible]	446	573	855
300	1555	[illegible]	1617	[illegible]				960	[illegible]	240	389	608
290	1431	[illegible]	[illegible]	[illegible]				852	[illegible]	117	219	375
280	[illegible]	[illegible]	[illegible]	[illegible]				[illegible]	[illegible]	[illegible]	[illegible]	219
270	1127	1041	1050	1341				615	[illegible]		56.1	112
260	973	875	[illegible]	1127				477				56.7
250	834	742	716	917				328				
240	711	636	609	729				213				
230	608	554	523	595				127				
220	[illegible]	491	465	501				65.1				
210	473	444	423	438				12.4				
200	430	411	393	393								
190	397	383	367	360								
180	[illegible]	356	341	331								
170	345	[illegible]	314	304								
160	319	301	280	276								
150	290	265	242	246								
140	257	235	213	219								
130	229	[illegible]	195	197								
120	[illegible]	[illegible]	184	184								
110	[illegible]		[illegible]	127								

ELECTRON DENSITY

PUERTO RICO 60 W 14 MAY 1960

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
QUAL							A		A	A	A	A
HMIN	238	219	258	236	251	247	258	118				111
SCAT	60.6	40.8	57.5	58.4	71.2	61.3	68.4	96.5				102
HMAXF	363	332	376	361	391	379	381	390				388
SHMAX	1276	721	915	775	811	691	684	1082				2023
KM												
400					906			735				
390					906		814	735				1303
380			1265		901	865	814	733				1301
370	1669		1261	1027	887	860	809	727				1292
360	1668		1240	1027	863	844	795	717				1278
350	1650		1191	1018	834	817	771	703				1257
340	1609	1240	1143	992	794	784	743	685				1228
330	1545	1239	1061	956	739	728	703	662				1192
320	1470	1214	944	902	672	660	650	637				1157
310	1365	1151	794	828	58	573	579	608				1113
300	1217	1050	608	729	489	477	494	573				1059
290	1027	917	433	608	370	362	396	540				995
280	754	739	219	477	240	252	276	502				923
270	477	555	83.8	335	127	136	127	464				841
260	219	362	22.3	191	60.0	71.4	28.2	424				754
250	83.8	198		90.8		20.3		382				664
240	23.7	104		40.2				339				586
230		56.4						297				521
220		4.9						256				471
210								219				436
200								183				410
190								155				387
180								130				364
170								110				337
160								94.7				305
150								83.5				271
140								78.9				231
130								74.3				198
120								53.7				185

ELECTRON DENSITY

PUERTO RICO 60 W 14 MAY 1960

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
QUAL	A	A	A	A	A	A	A				S	
HMIN	[illegible]	113			109	109		231	[illegible]	268	248	258
SCAT	79.8	[illegible]			[illegible]	74.3		67.6	[illegible]	[illegible]	47.7	52.8
HMAXF	376	[illegible]			[illegible]	327		386	[illegible]	402	377	389
SHMAX	2149	[illegible]			[illegible]	1359		931	880	849	738	664
KM												
410										1096		
400									1061	1095		
390								993	1055	1085		906
380	1669							991	1031	1058	1027	900
370	1667							980	1004	1018	1021	878
360	[illegible]							956	953	960	990	840
350	1626	[illegible]						923	886	882	936	782
340	1586	[illegible]						879	794	785	875	716
330	[illegible]	[illegible]				1265		825	699	661	794	626
320	1466	[illegible]			[illegible]	1262		763	[illegible]	508	700	523
310	1386	[illegible]			1664	1249		691	477	362	608	404
300	1294	1717			1638	1220		[illegible]	354	228	488	286
290	1178	[illegible]			1599	1184		514	233	133	362	179
280	[illegible]	[illegible]			[illegible]	1149		411	134	65.6	219	105
270	[illegible]	[illegible]			[illegible]	1087		305	77.1	12.4	117	57.9
260	754	1050			1319	1004		198	[illegible]		60.0	12.4
250	679	[illegible]			1182	904		120			12.4	
240	589	704			1023	794		60.0				
230	520	582			834	679						
220	469	[illegible]			643	559						
210	[illegible]	446			477	446						
200	397	[illegible]			[illegible]	362						
190	365	387			324	294						
180	[illegible]	358			286	250						
170	298	323			255	213						
160	266	286			223	179						
150	242	252			193	154						
140	221	226			172	131						
130	[illegible]	[illegible]			158	114						
120	200	[illegible]			149	104						
110					112	93.3						

ELECTRON DENSITY

PUERTO RICO 60 W 15 MAY 1960

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
QUAL								A	A	A	A	A
HMIN	256	241	248	242	195	207	236		111			110
SCAT	51.3	49.5	51.2	49.8	68.4	55.4	63.8		56.1			73.1
HMAXF	376	364	372	351	327	347	351		304			365
SHMAX	603	557	531	561	581	403	417		969			1823
KM												
380	875		754									
370	871	804	754									1420
360	853	800	746	854			532					1418
350	816	783	721	854		631	532					1404
340	766	746	687	844		614	538					1377
330	695	695	639	818	674	583	518					1335
320	599	637	561	773	677	485	501					1273
310	487	560	471	716	663	458	481		1070			1205
300	363	469	378	628	653	432	451		1071			1130
290	249	335	273	527	630	379	409		1054			1050
280	143	224	179	401	605	325	351		1030			967
270	71.4	134	97.7	250	563	267	286		986			884
260	29.3	80.3	57.0	120	513	204	198		897			803
250		40.6	12.4	53.8	446	143	112		810			723
240					363	97.7	43.9		702			643
230					277	66.4			584			573
220					16	45.5			477			500
210					83.9	12.4			389			441
200					42.3				331			400
190									286			374
180									245			347
170									211			307
160									179			249
150									150			209
140									127			186
130									112			173
120									102			165
110												40.2

ELECTRON DENSITY

PUERTO RICO 60 W 15 MAY 1960

TIME	1 00	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
QUAL		A	A	A		A	A	A	A	A	A	A
HMIN	110			109	105	113		188	240	251	261	255
SCAT	54.9			60.0	61.3	55.9		55.4	75.1	61.2	58.7	56.9
HMAXF	347			340	344	321		341	407	391	398	387
SHMAX	2045			2241	2233	1784		1078	1372	1126	1040	978
KM												
410									1373			
400									1390	1420	1303	
390									1376	1420	1296	1290
380									1349	1409	1271	1286
370									1309	1379	1226	1263
360									1258	1328	1163	1219
350	2000			2260	2261			1341	1193	1261	1083	1156
340	1993			2260	2257			1341	1135	1176	978	1075
330	1959			2244	2229	2112		1327	1065	1066	850	960
320	1896			2196	2170	2112		1291	908	908	706	834
310	1805			2104	2081	2091		1232	779	729	550	666
300	1680			1993	1964	2036		1149	632	522	389	488
290	1531			1859	1820	1948		1050	477	335	246	310
280	1367			1688	1630	1825		933	310	185	132	179
270	1188			1494	1411	1669		806	179	97.7	60.0	93.8
260	988			1292	1185	1474		679	102	44.6		43.9
250	811			1062	960	1240		524	53.6			
240	667			875	775	960		376				
230	562			716	628	670		240				
220	490			589	508	491		152				
210	439			490	436	377		93.0				
200	401			417	383	313		55.0				
190	377			372	344	271		12.4				
180	365			338	313	237						
170	333			313	287	209						
160	310			286	253	184						
150	283			246	226	159						
140	238			215	198	136						
130	207			190	168	122						
120	187			170	147	113						
110	49.6			112	83.8							

ELECTRON DENSITY

PUERTO RICO 60 W 16 MAY 1960

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
QUAL	A									A	A	
HMIN	251	229	222	236	237	197	189	111	115		111	109
SCAT	58.6	45.6	46.6	54.0	47.5	39.8	50.8	48.0	71.7		88.8	66.6
HMAXF	387	333	326	353	330	280	294	261	301		369	365
SHMAX	996	739	602	556	476	298	277	404	749		1694	2014
KM												
390	1290											
380	1286											
370	1263										1167	1669
360	1229				774						1163	1667
350	1163				773						1153	1649
340	1080	1211			763	774					1135	1612
330	983	1114	960	740	774						1109	1555
320	846	1193	956	703	768						1073	1477
310	679	1143	931	655	738					670	1031	1384
300	508	1060	884	587	694		410			679	986	1274
290	335	941	815	502	634	565	409			674	936	1165
280	188	794	727	404	546	565	402			663	880	1050
270	97.7	618	608	298	430	557	387	516	645		819	925
260	4.6	417	477	180	293	530	367	516	6.0		754	811
250		319	398	97.7	161	487	335	510	5.0		686	716
240		83.8	143	40.2	75.1	425	290	492	551		618	627
230		12.4	57.4		20.1	335	237	463	508		555	557
220						231	174	424	457		500	500
210						112	118	373	406		455	457
200						40.2	66.8	318	367		417	424
190							12.4	262	310		379	395
180								215	268		345	367
170								176	227		310	335
160								143	189		275	300
150								114	161		245	262
140								99.4	143		221	230
130								81.0	133		187	201
120								72.1	109		166	187
110												127

ELECTRON DENSITY

PUERTO RICO 60 W 16 MAY 1960

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
QUAL	A	A				A	A	A				
HMIN	109	100	110	109	113			238	238	258	255	259
SCAT	71.4	60.4	65.4	58.3	53.1			77.3	58.4	51.6	57.4	49.6
HMAXF	367	365	370	358	337			405	395	396	408	375
SHMAX	2440	2224	2560	2478	2220			1766	1401	1262	1321	1180
KM												
410								1683			1640	
400								1681	1712	1756	1633	
390								1667	1709	1749	1607	
380			2310					1639	1694	1712	1546	1815
370	2043	2044	2290					1597	1634	1637	1465	1810
360	2043	2044	2261	2518				1541	1555	1538	1362	1772
350	2020	2015	2196	2508				1471	1458	1402	1240	1697
340	1977	1 59	2103	2461	2430			1384	1341	1227	1074	1589
330	1914	1867	1991	2372	2414			1285	1179	1004	898	1446
320	1827	175	1845	2261	2355			1174	1004	794	697	1240
310	1724	1611	1669	2102	2245			1050	816	540	508	960
300	1604	1454	1459	1907	2094			909	608	362	348	643
290	1446	1280	125.	1669	1920			764	417	219	211	362
280	1287	107	1034	1446	1705			608	260	121	123	161
270	1110	911	866	1188	1483			446	161	63.8	71.4	71.4
260	963	786	716	960	1256			286	97.	12.4	33.1	12.4
250	824	664	606	776	1029			143	56.7			
240	716	56	528	633	834			28.7	12.4			
230	615	500	467	533	673							
220	540	449	425	462	540							
210	486	413	394	409	453							
200	443	386	368	370	386							
190	406	365	343	339	335							
180	376	351	319	313	30.							
170	348	338	298	291	274							
160	323	318	278	269	249							
150	296	296	257	240	223							
140	264	264	231	213	197							
130	231	231	197	188	174							
120	207	209	171	170	153							
110	143	143	40.6	97.2								

ELECTRON DENSITY

PUERTO RICO 60 W 17 MAY 1960

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
QUAL									A	A	A	A
HMIN	235	221	208	228	234	252	208	199	110			
SCAT	40.3	58.3	55.8	43.5	47.	58.5	58.4	81.6	58.6			
HMAXF	331	342	337	338	340	375	343	385	[illegible]			
SHMAX	971	1155	791	537	564	536	597	1098	1188			
KM												
390								928				
380						679		927				
370						678		920				
360						668		906				
350		1555			917	648	754	886				
340	1786	1555	1050	875	917	619	754	855				
330	1785	1539	1045	867	908	580	745	819	1215			
320	1751	1501	1024	836	874	530	725	779	1215			
310	1662	1439	986	780	834	464	694	734	1203			
300	1520	1355	934	706	761	389	653	684	1174			
290	1341	1254	859	608	656	310	599	631	1124			
280	1033	1119	767	495	521	240	535	573	1060			
270	716	932	655	362	36[illegible]	153	458	519	979			
260	362	679	531	219	198	71.4	367	460	[illegible]			
250	143	389	400	118	93.		262	401	776			
240	49.6	179	251	63.5	45.[illegible]		161	342	660			
230		71.4	134	12.4			[illegible].2	273	547			
220			68.1				57.4	179	455			
210			12.4				12.4	89.1	383			
200								12.4	327			
190									283			
180									244			
170									210			
160									181			
150									156			
140									136			
130									124			
120									117			
110									71.4			

ELECTRON DENSITY

PUERTO RICO 60 W 17 MAY 1960

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
QUAL	[illegible]	[illegible]	A		A	A	A					
HMIN		[illegible]		111	110	110		[illegible]	218	250	268	269
SCAT		83.		85.6	80.[illegible]	[illegible].0		64.[illegible]	[illegible]	[illegible]	[illegible]	71.5
HMAXF		[illegible]		371	[illegible]	[illegible]		[illegible]	370	[illegible]	401	421
SHMAX		181		1685	146[illegible]	[illegible]		[illegible]	[illegible]	655	497	649
KM												
430												697
420												697
410											643	694
400										735	643	683
390						1191				732	636	665
380		[illegible]		1265		11[illegible]0			7[illegible]	720	619	641
370		[illegible]		1265		118[illegible]		[illegible]	[illegible]	700	[illegible]	610
360		1300		1259	1191	1169		[illegible]	7[illegible]	671	554	573
350		127[illegible]		1245	1191	114[illegible]		[illegible]	7[illegible]	636	508	528
340		[illegible]		[illegible]	[illegible]	11[illegible]		[illegible]	7[illegible]	591	446	469
330		[illegible]		[illegible]	[illegible]	10[illegible]		[illegible]	[illegible]	534	376	399
320		115		1151	1144	10[illegible]		[illegible]	[illegible]	465	301	315
310		[illegible]		1104	111	[illegible]		7[illegible]	[illegible]	389	226	219
300				[illegible]	[illegible]	[illegible]		710	[illegible]	[illegible]	15	142
290		[illegible]		[illegible]	101	[illegible]		617	[illegible]	19	93.	[illegible].0
280		[illegible]		[illegible]	960	[illegible]		[illegible]	[illegible]	143	[illegible]	47.6
270		[illegible]		798	88[illegible]	[illegible]		[illegible]	[illegible]	[illegible].8	[illegible].4	6.5
260		[illegible]		673	804	[illegible]		254	1[illegible]8	49.6		
250		[illegible]		573	70	540		1[illegible]7	[illegible]			
240		4[illegible]		477	601	463		49.6	77.4			
230		4[illegible]		41[illegible]	49	394			49.6			
220		[illegible]		365	41	335			12.4			
210		36[illegible]		335	35[illegible]	295						
200		[illegible]		317	31[illegible]	264						
190		344		304	[illegible]	23[illegible]						
180		33[illegible]		254	260	209						
170		31[illegible]		283	238	183						
160		29[illegible]		268	21[illegible]	156						
150		[illegible]7		246	194	133						
140		240		217	16[illegible]	117						
130		210		184	14[illegible]	107						
120		[illegible]		167	13[illegible]	101						
110		[illegible]7.			49.	40.[illegible]						

ELECTRON DENSITY

PUERTO RICO 60 W 18 MAY 1960

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
QUAL						A				A	A	
HMIN	266	262	246	244	217	219	222	111	112	108		110
SCAT	42.8	60.7	47.3	51.9	61.4	43.[illegible]	33.7	49.4	42.[illegible]	53.4		83.2
HMAXF	373	397	356	361	369	32[illegible]	300	268	[illegible]	2[illegible]7		363
SHMAX	424	534	400	391	400	293	261	517	4[illegible]	784		1512
KM												
400		661										
390		659										
380	679	648										
370	678	629		557	461							1050
360	663	59[illegible]	608	557	45[illegible]							1049
350	626	564	605	550	450							1043
340	573	516	591	533	435							1029
330	508	451	562	506	417	477						1007
320	434	378	523	472	389	473						978
310	346	299	466	421	354	456	573					939
300	254	21[illegible]	396	357	313	427	573			735		895
290	161	131	318	286	267	385	561			743		844
280	83.8	79.1	233	206	219	3[illegible]8	524			721		789
270	40.2	44.1	143	127	170	262	463	670		699		729
260			71.4	71.4	127	198	362	666	679	664		670
250			28.[illegible]	40.2	91.5	127	240	649	678	621		611
240					64.[illegible]	79.0	127	618	665	569		555
230					44.[illegible]	48.4	5[illegible].4	576	631	512		505
220					12.4	7.1		515	580	459		463
210								436	513	415		429
200								349	437	385		401
190								262	354	359		376
180								207	286	335		353
170								168	235	295		329
160								140	198	251		305
150								118	170	206		274
140								102	143	161		240
130								91.1	125	139		210
120								79.2	114	131		188
110										101		127

ELECTRON DENSITY

PUERTO RICO 60 W 18 MAY 1960

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
QUAL							S					
HMIN	109	110	109	110	109	109	111	217	217	235	262	258
SCAT	76.[illegible]	62.	63.	56.5	61.	56.	74.[illegible]	64.0	61.	56.[illegible]	53.6	49.3
HMAXF	371	35[illegible]	348	33[illegible]	340	[illegible]	347	[illegible]	[illegible]	476	484	385
SHMAX	1907	15[illegible]	[illegible]	1901	[illegible]	1677	1734	1[illegible]11	10[illegible]	966	867	739
KM												
390											1191	1072
380	1367								1[illegible]0	1240	1190	1070
370	136[illegible]							1420	[illegible]	1234	1172	1049
360	1360	191[illegible]						1420	[illegible]	[illegible]210	1133	1004
350	1341	1815	[illegible]		[illegible]		[illegible]	1411	[illegible]	1166	1072	939
340	1310	1831	[illegible]	1947	[illegible]		[illegible]	1384	1210	1104	992	853
330	[illegible]	176[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1341	114[illegible]	1019	893	745
320	[illegible]	179	1840	188[illegible]	[illegible]	[illegible]	[illegible]74	[illegible]276	107	917	763	608
310	1147	161[illegible]	1757	180[illegible]	[illegible]	1917	[illegible]	[illegible]	[illegible]	794	620	467
300	[illegible]	[illegible]	165[illegible]	1700	[illegible]	[illegible]	[illegible]	1106	[illegible]	643	477	310
290	[illegible]81	137	1527	1567	171[illegible]	1786	[illegible]	[illegible]	727	490	310	198
280	883	121[illegible]	1371	1407	1564	1675	[illegible]	[illegible]	[illegible]	335	161	112
270	78[illegible]	1050	1209	1226	1386	154[illegible]	1193	687	44[illegible]	209	66.8	60.0
260	[illegible]	885	1050	1050	1193	1354	107[illegible]	508	20[illegible]	120		12.4
250	608	[illegible]	875	875	[illegible]78	1121	[illegible]	[illegible]	17[illegible]	[illegible]9.0		
240	540	61	716	716	803	8[illegible]9	[illegible]	179	107	[illegible].1		
230	481	5[illegible]	58[illegible]	[illegible]	64[illegible]	605	[illegible]43	33.8	60.[illegible]			
220	437	46	495	495	[illegible]	519	4[illegible]0	31.0	19.3			
210	40	417	431	428	43[illegible]	389	355					
200	379	385	397	383	371	314	253					
190	359	36[illegible]	357	351	331	266	183					
180	[illegible]4	344	[illegible]	325	301	232	142					
170	324	327	314	301	274	203	116					
160	301	30[illegible]	293	277	243	177	[illegible].1					
150	275	282	268	252	221	154	76.1					
140	249	25[illegible]	235	227	198	132	68.[illegible]					
130	203	228	202	205	174	113	64.9					
120	187	20[illegible]	187	185	154	104	60.[illegible]					
110	127	4[illegible].	127	49.6	[illegible]	83.8						

ELECTRON DENSITY

PUERTO RICO 60 W 19 MAY 1960

TIME	0000	01			0400	0500	0600				1000	1100
QUAL												
HMIN	248	214	204	228	240	257	246	110	116	113	111	110
SCAT	47.9	36.	31.6	36.4						69.2	72.2	73.9
HMAXF	364	30	321	356	370	391	386	285	300	335	359	346
SHMAX	773	557	490	425	390	370	467	759	1070	1416	1888	1996
KM												
400						477						
390						477	540					
380					500	472	539					
370	1191				500	459	532					
360	118			557	494	438	518				1487	
350	1166			556	484	412	498				1481	1669
340	1114			545	463	375	477			1191	1462	1665
330	1047		707	526	434	329	439			1189	1428	1648
320	941		707	493	398	275	389			1177	1380	1615
310	807	1094	699	464	354	219	335		1119	1152	1312	1568
300	643	1091	678	417	30	163	274		1117	1111	1229	1497
290	46	1050	643	356	247	116	211	1096	1102	1061	1143	1419
280	286	981	598	286	193	76.5	157	1091	1072	1004	1050	1329
270	143	857	533	219	132	50.8	116	1060	1029	936	947	1224
260	67.6	679	446	148	79.8	17.5	83.8	1004	974	875	854	1115
250	13.4	493	353	90.0	47.1		53.9	905	898	806	768	1004
240		28-	254	53.4			28.3	768	809	735	693	875
230		97.2	161	12.4				608	695	660	630	746
220		12.4	80.9					458	573	573	573	633
210			40.9					340	458	489	524	531
200								266	370	410	477	446
190								217	307	352	427	393
180								179	258	315	376	355
170								150	219	289	331	329
160								125	182	262	295	310
150								107	152	227	264	290
140								95.6	131	191	237	262
130								89.1	120	161	210	219
120								80.0	112	146	184	188
110								12.4	49.6			71.4

ELECTRON DENSITY

PUERTO RICO 60 W 19 MAY 1960

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
QUAL			S			S	A					
HMIN	109	109	113	109	110			209	201	228	236	233
SCAT	65.7	55.6	56.9	68.2	63.0			56.6	58.5	53.4	59.9	58.0
HMAXF	347	334	343	354	345			336	362	352	379	375
SHMAX	2098	2096	1971	2205	1974			1438	1234	1045	991	886
KM												
380											1215	1119
370									1473		1209	1117
360				2032					1473	1446	1186	1100
350	1937		1969	2030	1967				1457	1446	1147	1067
340	1931	2227	1969	2011	1965			1907	1420	1427	1090	1017
330	1903	2224	1954	1970	1940			1901	1362	1383	1015	952
320	1853	2193	1909	1907	1890			1869	1278	1311	917	862
310	1779	2125	1834	1822	1815			1806	1178	1218	802	748
300	1686	2021	1721	1713	1717			1714	1067	1096	679	627
290	1570	1891	1584	1586	1593			1590	909	938	540	500
280	1425	1708	1426	1435	1446			1446	754	764	398	362
270	1260	1496	1254	1262	1260			1240	608	573	255	240
260	1060	1268	1096	1050	1057			1050	464	389	143	143
250	896	1050	938	853	834			770	322	179	75.5	79.1
240	754	834	794	698	670			477	206	83.8	28.2	42.5
230	623	657	654	573	540			240	127	23.0		
220	526	540	550	477	451			97.2	77.9			
210	455	458	473	410	392			12.4	45.0			
200	407	408	417	366	350							
190	376	374	376	335	315							
180	354	351	340	315	283							
170	337	332	310	298	253							
160	313	313	283	279	225							
150	277	283	262	249	198							
140	240	245	225	219	170							
130	216	213	196	189	143							
120	201	191	182	170	134							
110	83.8	161		127	60.0							

ELECTRON DENSITY

PUERTO RICO 60 W 20 MAY 1960

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
QUAL								A	A		A	A
HMIN	255	231	242	251	211	209	199		111	110	109	
SCAT	50.7	48.3	47.3	48.6	53.0	41.0	42.4		87.8	65.8	47.3	
HMAXF	380	361	349	362	304	307	287		352	336	303	
SHMAX	754	747	624	647	572	346	297		1243	1403	1315	
KM												
390	1072											
380	1072											
370	1061	1094		993								
360	1021	1096		993					896			
350	974	1081	981	978					896			
340	900	1043	973	943					892	1290		
330	814	980	943	889					882	1287		
320	704	894	887	810					863	1270		
310	573	787	814	700	896	616			840	1240	1555	
300	417	657	710	573	895	612			811	1186	1554	
290	262	508	587	417	880	590	540		780	1132	1528	
280	161	367	437	262	850	552	536		746	1050	1467	
270	78.	256	277	138	805	493	517		710	960	1360	
260	35.0	130	144	60.0	742	410	485		671	857	1227	
250		80.3	55.4		654	317	437		628	754	1078	
240		46.			573	198	362		553	656	909	
230					336	105	262		535	567	744	
220					119	56.4	151		487	490	598	
210						4.9	71.4		440	424	489	
200							12.4		389	371	414	
190									342	324	367	
180									296	281	335	
170									238	240	302	
160									189	202	282	
150									147	169	253	
140									116	130	215	
130									107	122	173	
120									101	116	153	
110										49.6	83.3	

ELECTRON DENSITY

PUERTO RICO 60 W 20 MAY 1960

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
QUAL	A	A	A	A	S	S	S	A	A	S		
HMIN					111	112		200	207	256	261	256
SCAT					55.2	64.5		64.9	65.3	44.6	63.5	50.0
HMAXF					325	339		353	374	364	404	375
SHMAX					1840	1800		1312	1240	883	1199	879
KM												
410											1446	
400											1445	
390											1429	
380									1420		1395	1290
370									1413	1433	1341	1287
360								1500	1391	1430	1273	1261
350								1500	1351	1396	1189	1210
340						1801		1485	1295	1323	1077	1133
330					2032	1792		1453	1221	1217	934	1031
320					2028	1761		1403	1136	1079	754	888
310					1997	1709		1335	1026	902	540	716
300					1933	1634		1252	899	694	350	558
290					1833	1546		1149	754	463	219	376
280					1707	1426		1018	608	262	118	207
270					1545	1280		863	456	112	56.8	90.4
260					1341	1113		689	322	44.7		40.2
250					1096	960		508	219			
240					894	778		352	140			
230					707	613		219	87.8			
220					555	490		120	54.6			
210					441	389		60.0	17.9			
200					373	326						
190					333	279						
180					305	240						
170					282	210						
160					253	177						
150					233	143						
140					207	127						
130					183	121						
120					167	114						

ELECTRON DENSITY

PUERTO RICO 60 W 21 MAY 1960

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
QUAL												A
HMIN	249	211	196	206	230	[illegible]	240	110	107	110		
SCAT	52.6	43.7	[illegible]	45.5	[illegible]	47.3	7.7	46.3	77.0	71.9		
HMAXF	363	301	290	303	[illegible]	[illegible]	[illegible]	368	3?4	323		
SHMAX	883	686	460	278	[illegible]	[illegible]	[illegible]	458	[illegible]	1223		
KM												
370	1290											
360	1289											
350	1269				36?							
340	1227				367							
330	1161				357	382	446		804	1072		
320	1074				344	380	446		803	1072		
310	960	125		454	37?	371	441		7?7	1064		
300	784	125	524	45?	[illegible]	35?	4		744	1046		
290	685	1228	824	445	25	327	410		764	1017		
280	489	1177	81	425	216	274	339		7?6	976		
270	107	1087	776	396	16	247	6	590	70?	928		
260	83.8	760	72	354	120	191	303	587	663	869		
250	12.4	754	634	301	73.	127	219	570	618	800		
240		477	508	232	45.	78.6	12.4	540	571	726		
230		198	36?	154		46.		500	5?4	549		
220		71.	214	48.6				446	477	567		
210			10?	40.8				382	4?4	488		
200			46.					310	389	417		
190								248	346	358		
180								19?	29?	310		
170								15?	240	270		
160								123	178	232		
150								100	167	198		
140								88.4	139	176		
130								80.0	123	141		
120								73.1	112	129		
110								49.6	73.8	49.6		

ELECTRON DENSITY

PUERTO RICO 60 W 21 MAY 1960

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
QUAL					A	A	A		A	A		
HMIN				111		110		198	210	2?9	263	227
SCAT				64.		68.		54.	64.	64.	55.4	44.1
HMAXF				[illegible]		347		341	[illegible]	38?	381	347
SHMAX				[illegible]		1704		115	11?	[illegible]	500	711
KM												
390										1290	1240	
380										1290	1240	
370										279	1228	
360									1367	1253	1196	
350						1583			1366	1211	1143	1131
340				[illegible]		[illegible]		56	[illegible]	1153	1073	1104
330				[illegible]		[illegible]		564	[illegible]	983	976	1089
320				[illegible]		[illegible]		[illegible]	[illegible]	[illegible]	851	1023
310				1984		1467		1511	121?	875	642	930
300				1412		1373		1446	11?2	730	526	816
290				1?61		1407		135?	103?	573	346	664
280				1?70		[illegible]		1239	8??	417	179	498
270				1?55		1078		1082	7??	275	60.0	335
260				137?		[illegible]		894	5??	161		207
250				1143		714		657	370	?3.3		115
240				417		654		317	[illegible]	52.8		63.0
230				716		540		33	10?	6.1		19.6
220				556		446		127	54.8			
210				446		372		65.9				
200				383		321		12.4				
190				345		281						
180				317		247						
170				292		216						
160				262		186						
150				230		158						
140				198		138						
130				177		124						
120				164		116						
110						12.4						

ELECTRON DENSITY

PUERTO RICO 60 W 22 MAY 1960

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
QUAL	A	A	A	A	A					A	A	A
HMIN	246	22?	209	230	241	206	227	111	110			
SCAT	4?.1	51.3	47.2	55.	57.	41.5	[illegible]	4?.4	72.			
HMAXF	33	334	[illegible]	358	[illegible]	?26	32?	?40	3			
SHMAX	758	740	424	425	408	?19	276	55?	11??			
KM												
360				557	557							
350				554	557							
340	1240	1121		542	552							
330	1231	112?		522	540		439		1050			
320	1196	110		492	520		439		1049			
310	1136	1066		45	4??		43?		1043			
300	1054	1004	764	407	454	417	417		1026			
290	825	?17	761	350	406	415	394	735	9?			
280	754	804	740	286	344	402	362	735	960			
270	540	657	697	211	270	376	310	725	9?0			
260	186	477	635	136	165	[illegible]	?44	698	85?			
250	60.	?2	547	81.0	71.	[illegible]	165	653	786			
240		97.	428	49.6		?14	?3.8	591	701			
230		1?.4	26			133	?1.0	508	608			
220			11			71.4		417	508			
210			12.			26.		329	417			
200								259	353			
190								20?	305			
180								170	266			
170								138	231			
160								112	198			
150								94.?	168			
140								83.1	143			
130								78.5	120			
120								74.0	118			
110									49.6			

ELECTRON DENSITY

PUERTO RICO 60 W 22 MAY 1960

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
QUAL				A	[illegible]	A	[illegible]					A
HMIN	110	108	115	106		109		[illegible]	2?0	238	261	240
SCAT	65.	61.	61.	64.1		64.3		[illegible]	74.1	[illegible]	54.1	60.
HMAXF	36	34	347	345		?26		[illegible]	[illegible]	?60	?80	379
SHMAX	2?45	1?9	209	2110		16?4		1?4	1?	?56	896	828
KM												
390											1252	
380									1354		1?5	1167
370	1786								13?	1?90	124	1158
360	1786								[illegible]	1290	1210	1127
350	1774	1?84	[illegible]	2063				[illegible]	[illegible]	1277	1157	1071
340	1?4	[illegible]	[illegible]	2060				[illegible]	12??	1?39	1083	995
330	1685	1?6?	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	1175	?84	8?2
320	161	1?16	[illegible]	1?54		[illegible]		1443	11??	1096	844	754
310	1?2	183?	18?4	1?07		1670		1418	10?1	968	679	608
300	1404	1?37	1719	1813		16??		1?41	9?4	819	518	465
290	126	10?	1?81	16?		1?61		?40	8??	643	34?	324
280	111?	144?	14?4	1??		147		11??	74?	457	13?	198
270	?60	125	1250	1341		1367		[illegible]	5?5	310	7?.?	127
260	?42	105?	1050	10?6		1240		716	4?1	155		78.0
250	70?	9??	87?	?02		1072		46?	?6	71.4		47.4
240	601	?67	716	725		875		240	143	?0.7		
230	524	553	58	582		705		83.8	65.			
220	464	464	488	477		540						
210	421	407	4??	412		407						
200	38	371	379	369		318						
190	366	34?	349	337		266						
180	350	327	326	314		233						
170	335	311	308	296		206						
160	315	28	29?	274		179						
150	290	?6	273	245		152						
140	257	224	247	210		129						
130	228	190	219	182		113						
120	193	17?	198	170		10?						
110	14?	14?		148		83.3						

ELECTRON DENSITY

PUERTO RICO 60 W 23 MAY 1960

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
QUAL			A		A							S
HMIN	148	134	209	218	244	231	233	110	147	112	109	
SCAT	47.6	42.6	47.8	47.1	44.5	46.7	5.4	63.0	68.0	61.4	80.3	
HMAXF	354	328	319	344	340	333	330	321	324	319	361	
SHMAX	753	743	566	518	438	427	434	926	137	1485	1975	
KM												
370											1528	
360	1265										1528	
350	1263			764	707						1520	
340	1233			763	700	679	643				1500	
330	1170	1300		747	675	678	643	928	1341		1467	
320	1078	1299	885	716	632	667	638	928	1340	1528	1476	
310	940	1265	878	665	575	641	621	921	1334	1520	1371	
300	767	1204	852	597	491	603	593	903	1301	1493	1301	
290	573	1120	807	512	395	547	555	872	1251	1445	1223	
280	384	978	743	417	286	466	504	830	1174	1376	1131	
270	191	754	653	319	176	362	439	777	1131	1289	1039	
260	83.7	50	540	214	97.6	250	357	716	1050	1181	949	
250	24.0	267	401	143	46.4	177	240	646	941	1050	860	
240		41.2	254	83.8		60.0	7.2	566	827	917	771	
230			127	52.5				477	710	754	679	
220			67.1	17.4				396	586	608	594	
210			19.4					315	469	477	508	
200								255	371	397	436	
190								214	303	338	376	
180								179	257	297	328	
170								150	219	262	289	
160								126	188	231	249	
150								107	139	200	210	
140								92.3	115	167	177	
130								81.6	107	142	150	
120								75.5	102	132	136	
110								12.4	49.6		112	

ELECTRON DENSITY

PUERTO RICO 60 W 23 MAY 1960

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
QUAL			A	A	A	A	A					
HMIN	110	111						200	212	225	247	247
SCAT	63.8	55.8						56.2	57.7	52.3	55.0	53.0
HMAXF	369	354						337	352	355	370	368
SHMAX	2397	2294						1519	1303	1131	1102	922
KM												
380											1528	
370	2161										1528	1341
360	2150	2377							1683	1583	1516	1334
350	2114	2376							1683	1580	1480	1304
340	2050	2342						2000	1666	1552	1418	1249
330	1957	2265						1991	1624	1494	1330	1170
320	1844	2161						1950	1555	1404	1228	1070
310	1700	2011						1876	1466	1289	1078	917
300	1528	1823						1767	1356	1143	889	716
290	1341	1597						1626	1197	960	660	540
280	1157	1341						1457	1004	754	417	310
270	988	1094						1240	794	540	198	143
260	834	899						1004	552	310	91.3	71.4
250	706	738						754	349	179	33.5	20.3
240	608	608						508	188	90.0		
230	530	524						286	97.2	42.9		
220	470	457						143	49.6			
210	428	412						68.3				
200	396	380										
190	370	356										
180	352	337										
170	333	316										
160	312	294										
150	287	269										
140	255	244										
130	212	211										
120	186	183										
110	40.2											

ELECTRON DENSITY

PUERTO RICO 60 W 24 MAY 1960

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
QUAL								A	A	A	A	A
HMIN	250	249	228	230	260	198	231	110				
SCAT	64.3	61.4	44.1	56.8	44.2	63.0	65.6	77.9				
HMAXF	387	377	317	387	371	359	364	404				
SHMAX	1124	1048	673	864	757	822	696	983				
KM												
410								679				
400								679				
390	1367			1027				673				
380	1364	1341		1023	1143			663				
370	1345	1334		1005	1141		814	646				
360	1310	1310		971	1121	908	813	622				
350	1259	1268		917	1091	903	804	595				
340	1193	1207		853	1031	907	786	562				
330	1117	1142		775	948	879	758	526				
320	995	1034	1240	688	834	840	720	488				
310	834	884	1232	595	691	790	675	446				
300	653	700	1193	495	540	723	617	408				
290	459	500	1123	389	376	643	545	370				
280	274	310	1021	293	198	547	464	335				
270	137	169	853	205	71.4	446	372	304				
260	64.1	75.9	608	134		352	262	278				
250		19.4	286	79.3		282	143	258				
240			113	49.6		215	63.3	243				
230			25.6			152		230				
220						94.8		219				
210						56.3		205				
200						12.4		190				
190								172				
180								152				
170								132				
160								114				
150								98.7				
140								87.2				
130								80.0				
120								74.5				
110								49.6				

ELECTRON DENSITY

PUERTO RICO 60 W 24 MAY 1960

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
QUAL	A	A		A	A	A	A		A		A	A
HMIN	106		110			108		249	233	253	289	289
SCAT	75.5		55.5			61.9		63.8	66.2	51.8	66.2	54.8
HMAXF	372		318			321		393	418	385	428	404
SHMAX	1526		1025			868		590	758	582	777	596
KM												
430											917	
420									794		914	
410									791		900	824
400								670	779		876	822
390								669	758	794	841	810
380	1143							662	727	792	797	782
370	1143							647	690	777	742	742
360	1136							624	643	748	670	690
350	1119							591	583	704	583	622
340	1092							551	514	643	477	540
330	1059					824		504	446	573	327	446
320	1013		917			824		450	367	484	191	320
310	950		912			817		389	291	389	105	169
300	881		893			800		323	223	286	55.5	75.8
290	805		857			773		249	169	198	5.2	12.4
280	725		807			733		173	127	124		
270	643		746			685		102	92.8	71.4		
260	559		679			625		54.8	68.1	41.7		
250	491		611			554		5.5	49.6			
240	438		546			477			26.8			
230	399		488			408						
220	379		439			348						
210	362		401			302						
200	334		372			270						
190	316		349			243						
180	302		329			219						
170	289		312			195						
160	270		293			171						
150	245		267			150						
140	213		225			133						
130	186		196			122						
120	170		185			114						
110	161		71.4			83.8						

ELECTRON DENSITY

PUERTO RICO 60 W 25 MAY 1960

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
QUAL	A	[illegible]	A	A		A	A	A	A	A	A	A
HMIN	228	198	187	231	263	192	189					
SCAT	57.4	61.7	57.8	56.7	57.[illegible]	50.7	45.8					
HMAXF	355	337	342	380	37[illegible]	308	302					
SHMAX	674	572	448	386	36[illegible]	326	287					
KM												
390				469								
380				469	500							
370				465	500							
360	739			454	494							
350	737		540	435	481							
340	720	685	541	409	460							
330	886	681	534	377	43[illegible]							
320	834	674	520	335	39[illegible]							
310	766	654	498	289	341	477	446					
300	67[illegible]	624	470	240	27[illegible]	47[illegible]	446					
290	573	586	431	190	184	462	449					
280	446	540	380	141	11[illegible]	440	421					
270	322	480	32[illegible]	104	52.[illegible]	410	392					
260	198	410	26[illegible]	75.[illegible]		374	353					
250	115	330	206	54.4		317	301					
240	60.[illegible]	24[illegible]	157	34.5		247	240					
230	1[illegible].4	161	118			170	171					
220		97.[illegible]	86.0			112	112					
210		56.0	61.[illegible]			68.6	74.4					
200		12.4	44.[illegible]			42.2	47.3					
190			12.4				[illegible].3					

ELECTRON DENSITY

PUERTO RICO 60 W 25 MAY 1960

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
QUAL	A			A	A	A	A	A	[illegible]	A	S	S
HMIN		111	110			109		[illegible]27	21[illegible]	279	2[illegible]9	244
SCAT		75.9	14[illegible]			5[illegible].[illegible]		77.4	[illegible]0.1	47.2	68.[illegible]	60.7
HMAXF		345	42[illegible]			[illegible]17		405	[illegible]	[illegible]	[illegible]	382
SHMAX		1081	1850			91[illegible]		873	6[illegible]1	658	[illegible]18	836
KM												
430			[illegible]39									
420			938									
410			[illegible]35					834				
400			[illegible]2[illegible]					833		982	10[illegible]7	
390			[illegible]2					826		982	10[illegible]	1050
380			[illegible]11					81[illegible]	834	967	1006	1049
370			[illegible]89					791	831	931	980	1038
360			[illegible]88					76[illegible]	814	875	941	1014
350		[illegible]54	866					729	776	794	874	975
340		7[illegible]	84[illegible]					688	724	698	834	922
330		747	826					637	663	590	754	854
320		734	803			[illegible]17		578	5[illegible]	470	654	765
310		714	774			914		508	508	327	533	653
300		684	740			898		439	4[illegible]7	187	406	508
290		[illegible]	698			868		362	33[illegible]	83.4	276	362
280		615	650			876		276	254	12.4	179	240
270		[illegible]7[illegible]	59[illegible]			771		198	185		119	137
260		540	540			699		133	132		76.0	75.9
250		[illegible]	484			613		83.8	73.[illegible]		47.8	40.2
240		46[illegible]	43[illegible]			519		53.4	65.[illegible]		[illegible].1	
230		43[illegible]	39[illegible]			432		17.7	45.[illegible]			
220		41[illegible]	36[illegible]			353			12.4			
210		38[illegible]	34[illegible]			304						
200		36[illegible]	33[illegible]			267						
190		344	324			241						
180		3[illegible]4	314			221						
170		3[illegible]5	301			203						
160		[illegible]8[illegible]	286			185						
150		2[illegible]	254			165						
140		24[illegible]	219			143						
130		204	196			125						
120		18[illegible]	184			116						
110			4[illegible].6			60.0						

ELECTRON DENSITY

PUERTO RICO 60 W 26 MAY 1960

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
QUAL	A	A	A	A	A		A	A		A	S	A
HMIN	238	230	218	224	197		225		109			
SCAT	48.0	50.[illegible]	60.4	57.2	46.8		[illegible]0.6		55.4			
HMAXF	358	341	359	338	318		335		2[illegible]			
SHMAX	703	578	641	558	41[illegible]		327		1031			
KM												
360	1050		794									
350	104[illegible]	975	789									
340	1011	875	775	794			492					
330	[illegible]56	864	749	790			491					
320	88[illegible]	834	71[illegible]	775	634		481					
310	784	794	664	748	630		461					
300	664	728	608	713	61[illegible]		434		116[illegible]			
290	531	643	526	659	57[illegible]		395		116[illegible]			
280	389	526	427	573	535		335		115[illegible]			
270	219	389	326	468	470		262		11[illegible]0			
260	123	240	233	335	38[illegible]		187		1066			
250	64.1	127	149	187	29[illegible]		117		9[illegible]7			
240	12.4	60.0	92.6	97.2	207		6[illegible].0		903			
230			55.0	45.7	133		[illegible]3.1		7[illegible]4			
220			1[illegible].4		8[illegible].[illegible]				679			
210					53.1				566			
200					17.5				460			
190									367			
180									292			
170									240			
160									205			
150									173			
140									146			
130									126			
120									117			
110									71.4			

ELECTRON DENSITY

PUERTO RICO 60 W 26 MAY 1960

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
QUAL	A	A	S	S	A		S				A	A
HMIN					10[illegible]	112		228	231	251	251	289
SCAT					63.[illegible]	70.3		64.1	67.4	48.[illegible]	51.[illegible]	48.2
HMAXF					33[illegible]	342		37[illegible]	3[illegible]4	38[illegible]	377	413
SHMAX					1510	1461		978	110[illegible]	844	735	839
KM												
420												1215
410												1214
400									1215			1192
390									1214	1228		1144
380								1107	1202	1226	1050	1068
370								1107	1176	1205	1045	968
360								1095	1137	1157	10[illegible]	847
350						1341		1071	1085	1080	978	709
340					1460	1341		1031	1022	982	917	555
330					145[illegible]	1332		980	937	854	834	398
320					1444	1309		917	834	708	716	262
310					1411	127[illegible]		838	716	555	589	143
300					1360	1220		745	58[illegible]	389	446	67.4
290					128[illegible]	1160		643	4[illegible]6	240	301	12.4
280					120[illegible]	1084		531	310	143	173	
270					1096	984		417	206	83.8	97.2	
260					968	875		310	1[illegible]7	47.5	49.6	
250					822	754		179	74.[illegible]			
240					67[illegible]	636		83.8	44.[illegible]			
230					553	528		23.7				
220					454	435						
210					386	362						
200					340	305						
190					300	262						
180					286	232						
170					262	204						
160					238	179						
150					211	155						
140					182	134						
130					159	122						
120					14[illegible]	113						
110					97.[illegible]							

ELECTRON DENSITY

PUERTO RICO 60 W 27 MAY 1960

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
QUAL								E				A
HMIN	24[illegible]	1	240	10[illegible]	0	218	196	108	108	109	110	
SCAT	54.[illegible]	[illegible].1	52.3	44.[illegible]	3.	76.4	1.4	62.[illegible]	7.4	61.1	72.7	
HMAXF	367	341	[illegible]	[illegible]1	317	354	341	291	2[illegible]7	298	347	
SHMAX	[illegible]24	780	710	536	244	367	209	514	8[illegible]	1031	1447	
KM												
400						348						
390						348						
380						345						
370	1[illegible]90					340						
360	1284		1050			331						
350	1257	13[illegible]	1049			320	335				1119	
340	1208	1341	1037			305	335				1117	
330	1138	1329	1004			289	331				1104	
320	1050	1297	955		361	268	321				1081	
310	917	1246	883		360	244	304				1046	
300	754	1174	777	917	351	214	243	524	834	1061	1004	
290	573	1087	643	917	335	183	53	524	831	1057	947	
280	384	51	498	903	31[illegible]	151	217	520	817	1039	885	
270	219	766	335	866	286	120	176	509	788	1007	818	
260	105	540	179	810	24	9[illegible].1	140	492	746	963	749	
250	4[illegible].6	335	71.4	716	198	70.4	110	466	6[illegible]5	901	679	
240		16		586	137	54.0	86.6	435	633	820	612	
230		71.4		446	87.[illegible]	35.3	67.8	398	564	716	555	
220		12.4		262	51.1	[illegible].9	52.6	356	495	596	508	
210				136	6.5		40.2	310	431	484	471	
200				68.0			12.4	262	374	407	437	
190				12.4				221	324	354	402	
180								186	283	317	362	
170								156	245	287	322	
160								131	211	260	286	
150								109	182	230	247	
140								92.9	157	202	211	
130								81.8	136	172	181	
120								75.5	122	153	168	
110								40.2	106	83.8	49.6	

ELECTRON DENSITY

PUERTO RICO 60 W 27 MAY 1960

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
QUAL							A					
HMIN	107	109	109	111	113	111	110	227	211	232	228	240
SCAT	63.0	73.7	70.1	67.1	74.7	81.0	61.0	43.9	59.6	54.8	59.6	52.1
HMAXF	334	349	351	342	354	373	355	324	356	359	379	370
SHMAX	1784	1587	1921	1761	1634	1810	1507	898	1014	842	905	676
KM												
380						1446					1096	939
370						1446			1215		1089	939
360			1669		1341	1438	1555		1213	1143	1067	931
350		1667	1668	1612	1340	1418	1552		1195	1136	1030	906
340	166	1662	1659	1611	1330	1388	1531		1160	1110	977	863
330	1667	1641	1632	1600	1308	1347	1488	1555	1108	1065	909	804
320	1646	1604	1588	1570	1273	1290	1425	1553	1040	1004	823	728
310	1604	1551	1526	1522	1224	1229	1341	1518	953	917	724	631
300	1551	1483	1458	1457	1164	1158	1240	1446	848	811	608	516
290	1476	1402	1361	1376	1096	1069	1108	1323	732	679	477	389
280	1380	1301	1240	1279	1017	960	960	1172	608	540	353	262
270	1256	1191	1123	1154	930	854	806	960	469	371	226	161
260	1130	1064	977	1018	834	742	652	697	335	209	143	90.2
250	975	917	820	875	742	633	516	362	219	105	89.6	49.6
240	815	794	679	726	643	540	410	143	122	53.8	53.5	
230	664	674	573	608	555	459	335	40.2	64.7		12.4	
220	540	573	484	508	477	395	282		19.9			
210	469	490	427	437	413	346	240					
200	408	433	387	386	362	305	206					
190	372	392	359	348	322	270	175					
180	349	362	339	318	284	237	149					
170	327	335	319	292	260	208	127					
160	300	309	300	266	233	179	110					
150	267	286	274	240	206	153	96.1					
140	225	244	233	211	177	132	85.6					
130	196	204	198	179	157	122	79.3					
120	188	188	186	165	145	114	73.7					
110	169	143	143				12.4					

ELECTRON DENSITY

PUERTO RICO 60 W 28 MAY 1960

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
QUAL	S		A	A	A		A		A	A		A
HMIN	265	224	219	217	256	238	208	109	110		108	109
SCAT	50.6	53.9	61.1	65.9	62.4	47.4	42.4	39.7	49.[illegible]		88.[illegible]	84.6
HMAXF	376	335	337	372	392	343	[illegible]4	260	[illegible]		341	367
SHMAX	578	655	493	507	46[illegible]	371	[illegible]	571	6[illegible]		1305	1758
KM												
400					565							
390					565							
380	354			565	561							
370	84			565	550							1265
360	326			560	532							1263
350	727			543	503	590					917	1252
340	736	43	643	531	475	590					917	1232
330	667	72[illegible]	641	508	434	579					914	1204
320	761	72	631	477	385	554					904	1167
310	440	[illegible]	617	442	325	511					889	1120
300	724	347	534	392	255	468	716				867	1066
290	197	787	551	335	170	276	715				838	1004
280	104	734	504	271	107	310	697				805	929
270	43.6	591	442	212	55.[illegible]	178	660	917	604		769	849
260		44	362	156	12.[illegible]	112	603	917	[illegible]		723	762
250		262	257	106		60.0	523	901	712		679	673
240		127	151	71.4		12.4	382	853	7[illegible]		624	598
230		42.	71.4	47.2			206	732	720		577	529
220			12.4	12.4			77.2	679	6[illegible]		526	473
210							24.6	530	579		477	430
200								389	4[illegible]		436	398
190								271	369		401	374
180								202	306		374	352
170								154	251		347	329
160								121	267		319	301
150								97.2	170		286	269
140								83.4	143		251	236
130								78.6	121		209	210
120								72.[illegible]	113		177	191
110								49.6	49.6		151	161

ELECTRON DENSITY

PUERTO RICO 60 W 28 MAY 1960

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
QUAL			S			A	A	A	A	A	A	
HMIN	109	108		110	112	110		228	271	238	271	270
SCAT	76.4	64.2		62.3	65.	71.9		75.4	67.9	54.7	52.4	65.9
HMAXF	361	351		336	335	345		412	425	373	402	422
SHMAX	1929	2023		1767	1681	1564		1386	1437	1293	1251	1429
KM												
430									1612			1626
420								1341	1610			1625
410								1341	1592		1756	1612
400								1332	1558		1756	1581
390								1312	1506		1735	1530
380								1280	1435	1741	1682	1461
370	1528							1236	1352	1740	1597	1372
360	1528	1877						1179	1251	1717	1477	1268
350	1520	1876				1446		1117	1120	1665	1331	1143
340	1500	1863		1741	1612	1445		1032	960	1584	1143	982
330	1466	1828		1738	1609	1431		931	754	1473	917	783
320	1413	1770		1713	1590	1403		824	540	1341	643	585
310	1353	1680		1667	1553	1362		709	362	1162	417	400
300	1276	1584		1598	1496	1300		591	198	960	219	240
290	1193	1454		1504	1418	1232		466	112	716	112	127
280	1104	1308		1393	1321	1153		348	56.7	461	57.1	60.0
270	1004	1151		1255	1210	1050		234		262		
260	895	978		1085	1085	925		147		127		
250	783	812		917	934	794		90.5		66.3		
240	679	668		754	778	650		54.0		12.4		
230	585	553		608	633	521		12.4				
220	508	471		494	509	417						
210	446	417		422	426	335						
200	401	380		376	370	286						
190	367	354		344	331	250						
180	342	334		317	300	219						
170	319	315		290	272	189						
160	295	291		262	242	162						
150	267	257		219	211	142						
140	228	223		189	179	129						
130	198	198		173	158	121						
120	186	187		163	144	115						
110	143	143		49.6		40.2						

ELECTRON DENSITY

PUERTO RICO 60 W 29 MAY 1960

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
QUAL	C		A	A	A	A	A		A	A	A	A
HMIN	283	231	189	208	262	256	309	106	105			
SCAT	55.0	51.0	45.1	66.9	61.5	68.6	60.9	55.7	70.6			
HMAXF	425	347	290	365	397	425	417	325	317			
SHMAX	1194	1354	659	546	397	390	248	581	[illegible]			
KM												
430	1555					403						
420	1552					402	342					
410	1526					398	340					
400	1474				477	389	332					
390	1391				475	377	317					
380	1289				467	359	296					
370	1161			590	453	338	268					
360	1014			590	434	313	233					
350	834	2048		583	403	282	195					
340	643	2038		570	374	245	154					
330	446	1999		550	331	206	121	582				
320	86	1907		583	286	168	[illegible]	581	643			
310	161	1780		491	228	132	[illegible]	571	641			
300	83.8	161	1102	451	170	100		552	634			
290	43.6	1381	1107	402	116	75.4		525	[illegible]			
280		1096	1094	350	71.4	56.5		489	598			
270		754	1054	291	43.6	42.0		439	573			
260		387	984	231		12.4		379	540			
250		179	890	171				318	498			
240		71.4	754	114				266	446			
230			583	75.2				231	389			
220			389	49.6				207	331			
210			198	12.4				189	286			
200			82.8					172	258			
190			12.4					154	236			
180								135	214			
170								117	186			
160								100	154			
150								88.7	120			
140								82.0	117			
130								78.5	109			
120								75.0	104			
110								71.4	98.3			

ELECTRON DENSITY

PUERTO RICO 60 W 29 MAY 1960

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
QUAL			A	A	A	A	A	A		A	A	A
HMIN	[illegible]	[illegible]						198	[illegible]	219	[illegible]	257
SCAT	84.[illegible]	[illegible]						75.9	54.4	66.1	54.8	73.8
HMAXF	[illegible]	[illegible]						383	[illegible]	385	387	438
SHMAX	[illegible]	1424						760	577	680	[illegible]	618
KM												
440												608
430												606
420												599
410												586
400									754			567
390		[illegible]						707	[illegible]	735	[illegible]	543
380		[illegible]						707	748	734	[illegible]	514
370	804	88[illegible]						702	719	726	609	480
360	[illegible]	878						691	[illegible]	709	586	437
350	[illegible]	858						674	[illegible]	684	550	386
340	[illegible]	[illegible]						651	[illegible]	650	508	329
330	764	[illegible]						621	[illegible]	610	455	270
320	740	779						586	446	558	306	209
310	716	744						545	357	500	327	157
300	679	703						498	268	432	258	116
290	634	656						446	173	355	191	83.9
280	586	608						389	107	279	133	61.7
270	533	[illegible]						335	63.[illegible]	208	94.2	44.[illegible]
260	483	497						280	[illegible]	148	64.[illegible]	[illegible]
250	439	44[illegible]						224		101	[illegible]	
240	[illegible]	411						168		68.2	3.8	
230	[illegible]	[illegible]						120		45.3		
220	[illegible]	[illegible]						79.6		8.0		
210	[illegible]	343						49.6				
200	[illegible]	330						12.4				
190	325	[illegible]										
180	[illegible]	310										
170	[illegible]	[illegible]										
160	297	279										
150	[illegible]	[illegible]										
140	[illegible]	[illegible]										
130	[illegible]	[illegible]										
120	[illegible]	183										
110	71.4	[illegible]										

ELECTRON DENSITY

PUERTO RICO 60 W 30 MAY 1960

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
QUAL			A					A	A	A	A	A
HMIN	290	245	225	240	249	267	242			108		
SCAT	54.0	51.0	69.3	55.7	[illegible]	71.2	81.[illegible]			63.4		
HMAXF	414	370	403	371	[illegible]	426	411			308		
SHMAX	40	400	498	402	368	429	567			876		
KM												
430						446						
420	540					446	524					
410	540		508			441	524					
400	532		508			432	521					
390	514		504			417	515					
380	486	557	494	524	492	400	505					
370	451	557	480	524	490	379	490					
360	406	551	460	518	481	351	472					
350	354	534	438	504	463	317	450					
340	296	508	405	482	442	277	423					
330	228	468	366	452	407	234	393					
320	143	421	323	414	354	189	358					
310	86.7	362	276	362	297	143	318			804		
300	49.6	294	227	301	232	97.2	272			801		
290		219	179	240	175	67.1	224			788		
280		151	139	175	124	45.4	174			766		
270		97.2	105	116	79.3	12.4	123			730		
260		60.0	79.7	73.3	48.6		75.0			687		
250		30.7	60.0	46.1	6.[illegible]		43.9			638		
240			44.0							582		
230			15.8							525		
220										470		
210										423		
200										381		
190										342		
180										301		
170										262		
160										222		
150										183		
140										142		
130										126		
120										119		
110										112		

ELECTRON DENSITY

PUERTO RICO 60 W 30 MAY 1960

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
QUAL	A				A	A	A	A	A*			
HMIN		109	102	109				208	260	253	258	268
SCAT		57.2	60.7	50.0				56.3	56.[illegible]	47.6	61.6	59.0
HMAXF		[illegible]	326	289				351	[illegible]	372	406	398
SHMAX		[illegible]	140	881				652	61[illegible]	512	646	592
KM												
410											764	
400											762	764
390									814		751	760
380									814	754	730	746
370									806	754	697	721
360								844	786	742	657	684
350								844	754	712	608	638
340								835	707	665	540	573
330		1143	1341					813	651	608	467	495
320		1145	1338					776	579	530	380	401
310		1110	1318					729	485	441	292	294
300		1067	1280					667	379	341	208	186
290		1009	1222	928				586	277	240	136	107
280		932	1156	920				485	170	149	83.8	60.0
270		845	1056	888				376	71.4	82.8	52.1	12.4
260		749	936	843				262		44.7	12.4	
250		650	794	785				179				
240		556	664	716				121				
230		477	557	643				79.3				
220		417	477	559				49.6				
210		384	423	484				12.4				
200		359	386	417								
190		340	360	370								
180		322	339	335								
170		301	316	307								
160		275	289	283								
150		236	259	260								
140		210	226	230								
130		194	201	203								
120		185	189	184								
110		143	161	97.2								

ELECTRON DENSITY

PUERTO RICO 60 W 31 MAY 1960

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
QUAL	S							A	A	A	A	A
HMIN	246	257	267	271	258	260	202	110	109			
SCAT	51.4	50.1	60.7	60.7	52.3	53.3	65.5	51.0	76.4			
HMAXF	380	380	393	414	376	383	371	312	320			
SHMAX	518	436	434	421	393	379	419	623	1045			
KM												
420				508								
410				507								
400			540	501								
390	497	616	542	488		516						
380	497	616	534	467	548	515	446					
370	490	611	521	441	547	506	446					
360	667	593	499	408	536	487	443					
350	633	563	472	362	515	459	435					
340	588	5[illegible]	437	310	483	423	422					
330	536	465	393	252	443	378	402		949			
320	466	397	335	191	389	323	380	716	949			
310	389	325	267	135	329	266	350	716	945			
300	30[illegible]	24[illegible]	198	90.4	265	189	316	707	933			
290	219	170	139	60.0	184	123	277	685	912			
280	143	102	83.8	40.2	117	73.8	234	650	884			
270	91.0	60.0	31.0		60.0	46.4	190	602	849			
260	57.2	31.0			12.4		149	540	806			
250	23.2						114	457	748			
240							85.9	366	679			
230							64.6	290	598			
220							48.1	238	500			
210							35.9	209	397			
200								185	326			
190								158	274			
180								131	230			
170								108	194			
160								93.5	164			
150								83.8	139			
140								80.1	121			
130								76.3	109			
120								72.5	103			
110								12.4	71.4			

ELECTRON DENSITY

PUERTO RICO 60 W 31 MAY 1960

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
QUAL	A	A	S		A	A	A	A	A	A	F	A
HMIN			109	108				200				
SCAT			78.7	77.9				58.5				
HMAXF			358	361				350				
SHMAX			1769	1792				1180				
KM												
370				1393								
360			1393	1393				1460				
350			1390	1387				1460				
340			1375	1368				1449				
330			1350	1338				1417				
320			1313	1292				1363				
310			1265	1245				1286				
300			1204	1181				1192				
290			1143	1106				1073				
280			1050	1011				927				
270			946	906				754				
260			834	804				588				
250			728	706				417				
240			624	619				262				
230			536	545				161				
220			468	484				93.1				
210			421	437				49.6				
200			389	400								
190			362	368								
180			340	341								
170			316	315								
160			291	286								
150			262	254								
140			230	224								
130			203	202								
120			186	188								
110			71.4	143								

AVERAGE ELECTRON DENSITY KP BELOW 4.5

PUERTO RICO 60 W MAY 1960

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
COUNT	26	26	27	27	27	25	27	19	18	13	10	11
HMIN	250	235	231	231	235	229	230	115	110	110	110	110
36976	?	?	5.1	4.8	4.?	5.0	?.2	4.0	3.?	3.4	3.4	3.2
SCAT	52.4	53.?	52.8	55.8	57.?	54.5	4.1	63.4	65.2	74.3	71.5	76.7
NMAX	1070	1015	814	701	62?	549	524	695	914	1071	1221	1383
HMAXF	372	35?	349	337	35?	32?	341	307	305	328	337	355
SHMAX	750	700	565	513	471	403	370	664	934	1278	1448	1759
SHINF	3767	3564	2861	2494	223?	1951	1848	2625	3512	4298	4893	5659
KM												
950	97.5	83.?	66.2	59.3	53.?	46.7	42.0	47.3	60.?	80.2	94.7	118
900	125	107	84.9	76.0	68.?	59.9	?3.8	60.7	78.1	103	121	151
850	160	137	109	97.?	88.?	76.8	?.0	77.8	100	132	156	193
800	205	17?	139	125	11?	98.4	?.4	99.7	12?	169	199	248
750	26?	?24	178	160	145	1?6	113	128	165	216	255	317
700	334	28?	228	204	184	160	144	163	210	276	326	404
650	424	363	289	259	234	20?	183	208	268	352	415	513
600	534	459	365	326	29?	255	230	263	341	445	525	647
550	661	57?	456	407	36?	317	286	331	4??	559	658	807
500	80?	70?	560	497	44?	386	349	410	5??	691	811	988
490	?31	73?	581	516	46?	490	362	427	?	719	844	1025
480	860	75?	60?	53?	48	41?	37?	444	?1	748	877	1063
470	888	78?	62?	554	49?	4?7	388	461	605	777	910	1100
460	914	81	646	572	51?	441	401	479	6?	806	943	1137
450	940	83?	667	590	531	45?	413	497	6??	834	975	1172
440	96?	?64	687	607	54?	465	42?	514	6?	863	1007	1207
430	987	88	707	623	560	476	437	531	70?	8?1	1039	1239
420	1007	?1	725	639	57?	487	447	548	7?	918	1069	1270
410	1024	93?	742	652	58?	495	458	56?	7?0	943	10?7	1297
400	1036	95?	758	665	59?	50?	466	581	7?	966	11?3	1322
390	1044	96?	771	674	60	503	474	596	7?	990	1147	1342
380	1046	98?	781	682	60	51?	480	610	81?	1010	1168	1358
370	1041	?9?	788	686	611	513	48?	6??	8??	1028	1186	1369
360	1025	?9?	790	686	60	511	488	6??	8?	10??	1199	1373
350	993	?9	786	680	60?	505	489	641	8??	10?2	1207	1370
340	946	97	774	667	?8	49?	487	648	8?0	1038	1206	1356
330	88	?5	751	644	56?	451	48?	65?	8?	1058	1201	134?
320	800	910	716	610	53?	460	47?	655	8??	105?	1184	1295
310	69?	850	668	563	49?	4?1	45?	654	8	1038	1157	1246
300	57?	77?	605	508	44?	4?7	4??	649	8	1015	1119	1185
290	446	670	528	41?	37?	454	406	641	8??	984	1068	111?
280	310	55?	445	360	310	306	369	6?8	8?	94?	1007	1041
270	19?	420	356	275	238	251	3?1	609	8	891	?34	942
260	9?.?	28?	272	193	169	195	262	?82	741	830	8?2	847
250	36.?	16?	196	123	115	142	191	547	74?	76?	765	751
240	1?.3	84.7	127	71.9	71.4	99.6	110	50?	631	640	?78	657
230	4.8	?.?	75.?	38.8	35.2	62.9	?8.3	450	610	616	?77	573
220	.7	?.5	40.6	16.0	16.7	35.3	?8.?	391	5?	543	5?5	50?
210		.?	16.3	7.0	?	16.?	13.6	329	4??	475	466	447
200		.?	6.2	?.?	?	6.7	?.1	267	38?	416	418	407
190			.9	.5			.7	213	?	365	379	377
180								169	?	323	344	351
170								13?	2?	283	311	325
160								11?	189	247	281	295
150								?5.5	15?	210	249	263
140								84.6	134	176	217	231
130								77.?	11?	15?	188	20?
120								70.7	110	140	170	1?6
110								26.0	47.7	6?.4	61.1	80.?

AVERAGE ELECTRON DENSITY KP BELOW 4.5

PUERTO RICO 60 W MAY 1960

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
COUNT	14	16	16	16	15	17	8	27	?6	26	26	25
HMIN	10	110	110	110	110	110	155	218	232	243	255	255
RATIO	3.4	3.5	3.5	3.6	3.7	3.7	4.1	4.3	4.3	4.7	4.6	4.7
SCAT	70.?	6?.9	71.?	66.?	65.	69.7	?4.6	64.1	63.?	56.0	58.0	56.8
NMAX	1657	171?	1656	1766	1691	1458	1278	1253	1164	1142	1112	1098
HMAXF	355	347	347	345	337	339	347	363	3?7	381	392	390
SHMAX	193?	189?	1845	1909	1748	1522	1193	1064	101?	874	871	834
SHINF	6612	672?	6517	68?0	651?	5636	?799	4598	42??	4097	4007	3931
KM												
950	140	13?	134	142	131	114	104	108	114	109	112	110
900	17?	17?	17?	182	167	146	134	139	146	140	144	141
850	?30	?2?	22?	234	215	187	171	178	1?7	180	184	180
800	294	29?	283	??	275	240	219	228	229	230	236	231
750	?76	?7?	36?	383	35?	307	281	292	305	294	301	294
700	480	47?	46?	46?	450	392	356	372	389	375	383	375
650	610	60?	58?	622	57?	4?9	456	472	442	475	484	474
600	76?	76?	741	785	72?	631	576	595	617	596	606	593
550	?60	?6?	?26	983	90?	790	720	741	762	7?7	747	732
500	1177	118?	1138	1210	112?	974	885	904	917	890	897	878
490	1?2?	1???	11??	1257	1167	1013	920	938	948	920	926	907
480	1?67	1274	1227	1305	121?	1052	955	971	978	950	955	935
470	1311	13??	1271	1353	1258	1031	989	1004	1007	979	982	962
460	1?56	13?	1315	1401	1304	1131	1024	1037	1035	1006	1007	987
450	13?	141?	1359	1443	135?	1169	1058	1068	1060	1032	1031	1010
440	1441	145?	1401	1454	1395	1208	1091	1098	1094	1057	1052	1032
430	14??	1???	144?	153?	143?	1245	1123	1127	1105	1078	1070	1050
420	1?1?	1540	1480	1580	1481	1280	1153	1153	11?2	1097	1085	1065
410	1?5?	15??	1516	161?	1???	1314	1181	1177	1136	1111	1096	1076
400	1?8	161?	154?	1655	1???	1345	1207	1197	1145	1122	1101	1080
390	160?	164?	1578	1687	15??	13??	1229	1213	1147	1125	1099	1078
380	162?	160?	160?	1714	162?	1??8	1248	1225	1141	1120	1088	1067
370	164?	168?	163?	1735	1647	1418	1263	1230	1125	1103	1063	1044
360	164?	170?	1636	1749	166?	14?3	1272	1229	1099	1073	1021	1006
350	154?	1704	164?	1755	1678	144?	1275	1219	1058	1027	962	951
340	16??	16??	1637	1750	1681	1443	1267	1199	1002	961	885	878
330	15?7	16?	1618	17?	167?	1436	1246	1166	930	876	789	784
320	154?	1629	15??	1668	164?	1417	1208	1118	844	773	675	671
310	143?	15??	152?	1627	160?	1384	1154	1054	747	656	548	540
300	139?	14?	1453	1546	153?	1334	1086	972	639	529	420	407
290	1294	137?	13??	1448	1454	1268	1001	871	521	406	291	279
280	1177	124?	124?	1325	1350	1184	898	754	405	?93	180	174
270	1?44	1109	1117	1180	1223	1082	780	618	296	199	97.2	96.8
260	?11	?5	979	1023	1080	963	651	472	1?8	125	40.?	50.3
250	781	811	83?	863	921	822	521	316	1?4	69.9	19.1	22.1
240	?6?	681	705	717	76?	676	400	193	70.?	38.7	6.0	7.9
230	?6?	???	590	596	62?	548	306	101	38.3	16.?	.5	1.8
220	??	4?	500	501	51?	441	233	?0.3	17.8	?.?		
210	4?	44?	437	434	42?	360	170	21.8	6.?	.1		
200	40?	40	394	388	367	304	121	3.9	.?			
190	37?	37?	36?	354	32?	263	?0.?	.5				
180	347	3??	3?8	327	???	???	??.?					
170	3??	??	315	30?	265	200	60.8					
160	300	30?	29?	277	23?	17?	51.2					
150	?7	??	263	?48	?0	14?	44.?					
140	?36	240	231	21?	18?	130	?0.0					
130	?09	?1	204	193	16?	119	?.5					
120	10?	10?	18?	177	14?	110	35.1					
110	10	94.?	77.?	80.1	?.?	37.7	7.?					

TABLES OF IONOSPHERIC DATA

MAY 1960 - FEBRUARY 1958

Table 1

Boulder, Colorado (40.0° N, 105.3° W) — May 1960

Time	h'F2	foF2	Count	h'F	foF1	h'E	foE	foEs	(M3000)F2
00		5.0	17						2.65
01		5.2	17						2.65
02		4.85	18						2.65
03		4.7	17						2.70
04		4.2	14						2.70
05		4.45	14					1.9	2.85
06		5.35	14					2.6	2.88
07		5.75	14					3.3	2.88
08		6.5	14					3.5	2.90
09		6.3	15					4.0	2.60
10		6.25	18					4.1	2.60
11		6.5	21					4.0	2.60
12		6.7	17					4.0	2.68
13		6.8	19					3.9	2.55
14		7.2	21					3.8	2.80
15		7.3	22					>2.9	2.80
16		7.7	20					3.1	2.85
17		7.4	20					3.1	2.85
18		8.0	21					3.0	2.95
19		7.8	20					2.5	3.00
20		7.15	20					2.8	3.00
21		6.6	19						2.90
22		5.8	17						2.75
23		5.2	16						2.70

Time: 105.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 2

Thule, Greenland (76.6° N, 68.7° W) — April 1960

Time	h'F2	foF2	Count	h'F	foF1	h'E	foE	foEs	(M3000)F2
00		(5.25)	22	270	---	125	----		(2.80)
01		(5.4)	23	270		120	(1.60)		(2.78)
02	---	(5.4)	23	270		(110)	1.80		(2.80)
03	---	(5.6)	20	260		(120)	1.95		(2.95)
04	---	(4.9)	21	250	---	118	2.00		(2.90)
05	(400)	(4.7)	15	250	(3.5)	110	2.18		(2.88)
06	(360)	(5.55)	16	240	(3.6)	109	2.42		(3.00)
07	(370)	(5.4)	17	230	4.0	108	2.60		(2.75)
08	(410)	(5.75)	18	240	3.9	107	2.80		(2.75)
09	415	(5.45)	20	235	(4.0)	105	2.85		(2.90)
10	(395)	(6.0)	14	230	4.1	105	3.00	3.2	(2.82)
11	370	(6.4)	17	(230)	4.2	104	3.00	3.1	(2.80)
12	400	(6.25)	18	220	4.1	105	2.85		(2.90)
13	385	(5.9)	16	225	(4.1)	104	2.90		(2.68)
14	395	(5.95)	22	220	4.1	105	2.90		(2.65)
15	380	(6.0)	21	230	4.0	105	2.80		(2.75)
16	<370	(5.8)	19	230	(3.8)	100	2.70		(2.80)
17	<400	(5.7)	23	245	(3.7)	110	2.50		(2.72)
18	(305)	(6.0)	23	250	---	111	2.30		(2.80)
19	---	(5.6)	21	260		120	2.12	2.3	(2.80)
20	---	(5.2)	23	270		(130)	1.90	2.1	(2.85)
21		(5.3)	25	265		125	1.90		(2.80)
22		(5.0)	25	270		120	1.72		(2.85)
23		(5.3)	22	270		<130	----		(2.78)

Time: 75.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 3

White Sands, New Mexico (32.3° N, 106.5° W) — April 1960

Time	h'F2	foF2	Count	h'F	foF1	h'E	foE	foEs	(M3000)F2
00		5.8	30	310				2.4	2.60
01		5.9	30	310				2.8	2.60
02		5.6	30	300				2.4	2.62
03		5.5	29	295				2.2	2.65
04		5.2	29	300				2.3	2.65
05		5.1	28	310					2.62
06	---	5.9	29	265		(130)	2.00	2.2	2.95
07	---	7.0	28	240	---	110	2.70	3.0	3.00
08	340	7.9	30	225	4.4	107	3.10	3.4	2.90
09	370	8.9	29	225	(4.8)	107	(3.38)	4.0	2.70
10	425	9.6	27	210	4.7	107	(3.70)	4.1	2.70
11	355	10.5	29	210	5.0	107	3.80	4.1	2.70
12	340	11.0	29	215	(5.2)	107	3.90	4.0	2.70
13	330	11.2	28	220	5.0	105	3.82	4.0	2.75
14	320	11.25	30	230	5.0	107	3.80	3.8	2.75
15	325	10.8	29	230	---	100	3.60	3.7	2.80
16	300	11.0	29	235	---	110	3.20	3.4	2.90
17	(475)	10.2	30	240	---	110	2.80	3.1	2.95
18		9.75	30	250	---	125	2.20	2.6	3.00
19		8.8	29	240				2.2	3.00
20		7.3	29	240				2.3	2.80
21		6.3	30	(270)				2.4	2.70
22		6.0	29	300				2.5	2.60
23		5.8	29	310				2.2	2.60

Time: 105.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 4

Huancayo, Peru (12.0° S, 75.3° W) — April 1960

Time	h'F2	foF2	Count	h'F	foF1	h'E	foE	foEs	(M3000)F2
00		8.9	23	220				4.3	3.10
01		8.3	27	230				4.1	3.05
02		7.3	27	240				3.8	3.08
03		6.6	25	240				3.8	3.00
04		6.2	25	240				3.0	3.10
05		5.5	25	240				3.2	3.18
06		5.0	26	260		---	1.45	4.0	3.00
07		9.4	29	245		<123	2.50	5.5	3.10
08		11.5	30	235		<118	(3.20)	7.4	2.90
09		12.5	30	220		113	(3.60)	0.8	2.60
10		12.55	30	215		111	(3.85)	9.0	2.45
11		12.2	30	210		111	(4.00)	9.0	2.35
12		11.8	30	205	---	110	(4.05)	9.0	2.35
13		11.9	30	200		109	(4.00)	9.0	2.32
14		12.1	30	200		109	(3.75)	9.0	2.32
15		12.15	30	205		109	(3.50)	8.8	2.30
16		11.95	30	230		111	(3.15)	7.5	2.25
17		11.65	30	255		115	(2.58)	6.9	2.30
18		11.2	30	290		<161	(1.55)	4.4	2.25
19		10.6	26	355					2.20
20		9.7	21	315					2.35
21		9.35	18	255					2.65
22		9.1	19	235				4.1	2.95
23		9.1	20	225				4.5	3.00

Time: 75.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 5

Ft. Munmouth, New Jersey (40.4° N, 74.1° W) — March 1960

Time	h'F2	foF2	Count	h'F	foF1	h'E	foE	foEs	(M3000)F2
00		5.85	22	270					2.75
01		5.7	19	270					2.75
02		5.25	18	270					2.70
03		5.1	21	270					2.72
04		4.6	23	270					2.75
05		4.3	22	270					2.75
06		4.0	22	260		---	----		3.00
07		6.7	25	240		120	2.50		3.20
08	(255)	7.9	28	230	---	115	2.82		3.20
09	(270)	8.6	27	220	---	112	3.20		3.15
10	270	9.4	29	220	---	112	3.45		3.05
11	275	10.1	28	210	---	113	3.60		3.00
12	265	10.4	27	210	---	114	(3.65)		2.95
13	270	10.4	28	220	---	115	3.60		2.95
14	270	10.55	28	220	---	115	3.50		2.95
15	---	10.35	28	225	---	115	3.35		2.95
16	---	10.0	27	230	---	119	2.90		3.00
17	---	9.8	27	240		120	2.50		3.00
18	---	9.5	26	235		---	----		3.05
19		8.7	27	235					2.95
20		7.95	26	240					2.95
21		7.0	26	240					2.90
22		6.4	23	250					2.85
23		6.05	20	265					2.82

Time: 75.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 6

White Sands, New Mexico (32.3° N, 106.5° W) — March 1960

Time	h'F2	foF2	Count	h'F	foF1	h'E	foE	foEs	(M3000)F2
00		5.0	30	280					2.80
01		5.0	30	290					2.70
02		5.0	31	285					2.70
03		4.9	30	280					2.75
04		4.8	31	275					2.75
05		4.8	31	<285					2.75
06		5.2	31	265		---	----		2.90
07		7.45	30	235		115	2.20		3.20
08	---	9.1	29	225		103	2.80		3.20
09	---	10.1	30	210		102	3.20	3.2	3.10
10	(260)	10.6	29	205		101	3.50		3.00
11	---	11.0	29	200	---	102	3.70		2.85
12	(285)	12.0	28	205	---	103	3.80		2.85
13	(290)	12.2	30	215	---	103	3.75		2.88
14	<295	12.0	30	215	---	103	3.70		2.85
15	---	11.8	30	225	---	103	3.50		2.85
16	---	11.7	29	230	---	105	3.10	3.1	2.95
17		11.05	30	235		109	2.60	2.8	3.00
18		10.7	29	225		<132	1.90	2.0	3.10
19		8.9	29	210				2.1	3.15
20		6.8	28	215					3.00
21		6.0	30	250					2.90
22		5.5	30	260					2.80
23		5.15	30	270					2.80

Time: 105.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 7

Grand Bahama I. (26.6° N, 78.2° W) March 1960

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		6.35	28	260					2.85
01		6.3	29	270					2.85
02		6.0	29	255					2.90
03		5.7	29	255					2.85
04		5.2	29	260					2.85
05		5.0	29	265					2.80
06		5.2	29	260		---	----		2.80
07		7.8	28	235		115	2.20		3.25
08		9.5	27	225		107	2.90		3.20
09	---	10.4	25	215	---	105	3.22		3.15
10	---	>11.0	26	210	---	105	3.50		3.05
11	---	11.4	27	200	---	105	3.70		3.00
12	(280)	12.0	26	200	---	105	(3.70)		2.90
13	290	12.0	28	210	---	105	3.70		2.90
14	(295)	12.0	27	215	---	105	3.70	3.7	2.85
15	(290)	11.05	28	220	---	110	3.50		2.85
16	---	11.75	28	230		109	3.20	3.3	2.90
17		(11.3)	27	235		110	2.80	2.9	2.95
18		(11.0)	27	230		<119	(2.00)		3.10
19		>9.0	27	210					(3.05)
20		7.8	28	215					2.98
21		7.0	30	245					2.85
22		6.9	29	<260					2.80
23		6.5	28	260					2.85

Time: 75.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 8

Talara, Peru (4.6° S, 81.3° W) March 1960

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		(12.3)	17	215				3.2	(3.00)
01		10.35	20	220				2.1	3.00
02		9.25	20	235				2.0	3.10
03		7.6	21	230					3.25
04		6.1	24	230				1.7	3.25
05		4.6	22	250				2.1	3.25
06		4.8	19	260					3.12
07		7.7	30	250		(129)	2.25		3.15
08		10.6	31	235		121	3.00	3.2	3.05
09		12.1	31	225		115	3.50		2.80
10		12.8	31	215		113	3.75		2.60
11		12.6	31	205		111	4.00		2.35
12		13.1	31	205		111	4.05		2.30
13		13.4	31	205		111	4.05		2.30
14		13.7	31	210		111	4.00		2.32
15		13.7	31	210		111	3.78		2.35
16		13.45	30	215		111	(3.40)	3.5	2.35
17		13.4	31	230		(115)	3.00	3.1	2.35
18		(13.2)	31	260		---	----		(2.32)
19		>13.0	31	310					2.30
20		(12.25)	22	380					(2.35)
21		(12.9)	9	310					(2.60)
22		(12.9)	7	(250)					(2.70)
23		12.9	13	220				1.9	2.95

Time: 75.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 9

Resolute Bay, Canada (74.7° N, 94.9° W) February 1960

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		4.7	29	270		---	----		2.65
01		5.2	29	260		---	----		2.60
02		5.1	29	260		---	----		2.60
03		5.0	29	260		---	----		2.60
04		4.0	29	280		---	----		2.55
05		4.6	29	290		---	----		2.50
06		4.5	29	270		---	1.25		2.50
07		4.9	29	270		---	1.20		2.50
08		4.6	29	280		120	1.30	1.4	2.55
09		5.8	29	280		105	1.50	1.6	2.60
10		6.2	29	270		110	1.65		2.70
11		6.4	29	260		110	1.80		2.70
12		6.3	29	270	---	110	1.90		2.75
13	---	6.9	29	270	---	110	1.90		2.70
14		6.9	29	265		110	1.80		2.75
15		6.5	29	260		110	1.70		2.70
16		6.5	29	250		115	1.40	1.8	2.75
17		6.6	29	250		110	1.30	1.4	2.60
18		6.2	29	250		---	1.20		2.65
19		6.1	29	260		---	----		2.65
20		5.9	29	250		---	----		2.70
21		5.3	29	260		---	----	1.2	2.60
22		5.1	29	260		---	----		2.60
23		4.9	29	260		---	----		2.60

Time: 90.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 27 seconds.

Table 10

Tromso, Norway (69.7° N, 19.0° E) February 1960

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		---	0	---		---	----	3.7	
01		(6.4)	2	---		---	----	(3.6)	----
02		(3.5)	1	---		---	----	(3.3)	
03		(4.0)	5	---		---	----	(3.3)	----
04		(4.1)	3	---		---	----	(3.2)	----
05		(4.2)	5	---		---	----	3.6	----
06		(3.5)	14	290		---	----	1.7	(2.60)
07		4.2	21	280		---	1.15		2.70
08		5.9	23	260		---	1.75		2.90
09	---	7.1	25	250		110	1.80		2.90
10	(250)	8.4	26	250		---	2.20		2.90
11	250	9.2	28	---		140	2.40		2.90
12	245	9.8	27	---		140	2.40		2.90
13	245	10.1	27	(250)		140	2.15		2.90
14	(240)	9.1	22	245		---	2.10		3.05
15		7.6	23	245		---	2.00		2.90
16		7.5	17	250		---	1.70	2.0	(2.90)
17		(7.6)	7	235		---	----	3.6	----
18		(5.3)	9	(235)		---	----	3.4	
19		(5.5)	11	(240)		---	----	3.8	----
20		(5.1)	6	(260)		---	----	3.8	
21		(4.7)	4	---		---	----	3.8	----
22		(4.9)	4	(310)		---	----	4.1	
23		(4.8)	4	---		---	----	3.5	----

Time: 15.0°E.
Sweep: 0.7 Mc to 25.0 Mc in 5 minutes, automatic operation.

Table 11

Kiruna, Sweden (67.8° N, 20.3° E) February 1960

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		(5.2)	8	330				3.0	(2.6)
01		(5.1)	6	320				3.2	(2.6)
02		(4.8)	8	340				3.0	(2.6)
03		4.4	11	310				1.9	2.6
04		4.3	13	300					2.6
05		3.6	14	290					2.6
06		3.6	17	290					2.6
07		4.3	25	275		---	1.4		2.8
08		5.8	26	250		---	1.6		2.95
09		7.0	29	245		110	2.0		3.0
10		8.0	27	240		125	2.1		3.0
11	---	9.3	27	240	---	120	2.2		3.0
12		9.8	28	240		125	2.3		3.0
13		10.1	29	240		130	2.2		3.2
14		10.0	27	230		125	2.2		3.1
15		0.4	25	240		---	2.0		3.15
16		0.3	17	240		---	1.5		3.15
17		7.2	12	245		---	---	2.2	3.0
18		6.5	12	270				3.0	3.0
19		5.4	16	275				3.3	2.8
20		4.7	13	300				3.0	2.7
21		5.0	11	350				4.1	(2.6)
22		(5.2)	7	365				3.2	(2.4)
23		(5.2)	6	340				4.4	(2.6)

Time: 15.0°E.
Sweep: 0.0 Mc to 15.0 Mc in 30 seconds.

Table 12

Sodankyla, Finland (67.4° N, 26.6° E) February 1960

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		(5.0)	1	330				(3.2)	----
01		(5.4)	2	310				3.4	----
02		(5.2)	2	320				3.5	----
03		(4.9)	3	315				3.3	----
04		(4.5)	3	315				2.9	----
05		(4.3)	5	310				3.2	(2.70)
06		(4.0)	2	290				3.0	----
07		(3.6)	4	290		---	----	3.0	----
08		5.1	11	265		---	E	(3.2)	2.95
09		6.6	17	245		---	E	(3.6)	3.05
10		7.5	18	240		120	2.20	(4.4)	3.00
11		9.0	21	235		115	2.40	(4.4)	3.00
12		9.8	23	235		120	2.50	(4.5)	3.00
13		10.6	20	235		120	2.40	(4.6)	3.00
14		10.3	24	230		120	2.35	(4.5)	3.05
15		10.4	20	230		125	2.30	(4.2)	3.10
16		8.0	17	230		---	1.85	(3.6)	3.10
17		8.7	11	230		---	E	(3.5)	3.10
18		(0.1)	9	240		---	E	(3.3)	(3.00)
19		(6.8)	9	265		---	----	(3.2)	(2.95)
20		(6.4)	5	275				(3.6)	(3.00)
21		(5.5)	6	275				3.5	(2.80)
22		(5.0)	4	310				3.3	----
23		(6.8)	2	340				3.6	----

Time: 30.0°E.
Sweep: 1.4 Mc to 22.0 Mc in 0 minutes, automatic operation.

Table 13

Lulea, Sweden (65.6° N, 22.1° E) February 1960

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		5.1	21	325					2.6
01		4.8	20	320					2.6
02		4.6	24	325		---	---		2.6
03		4.8	26	320		---	---		2.6
04		4.4	24	300		---	---		2.6
05		3.9	26	280		---	---		2.7
06		4.0	22	280		---	---		2.8
07		4.7	23	250		---	---		3.0
08		6.2	26	250		125	1.8		3.0
09		7.3	27	245		135	2.2		3.0
10		8.8	28	240		135	2.4		3.1
11		10.0	28	245		130	2.5		3.05
12		(10.8)	27	240		135	2.6		3.0
13		11.3	29	240		135	2.4		3.1
14		11.0	29	240		140	2.3		3.1
15		10.5	27	230		150	2.0		3.1
16		9.2	25	230		---	1.8		3.0
17		8.0	22	235		---	---		3.0
18		(6.7)	23	250		---	---		2.8
19		5.1	20	240		---	---		2.85
20		5.4	18	260		---	---		2.7
21		5.0	21	300		---	---	1.8	2.6
22		4.7	17	300		---	---	1.7	2.6
23		4.8	17	325				<1.7	2.55

Time: 15.0°E.
Sweep: 0.65 Mc to 25.0 Mc in 5 minutes, automatic operation.

Table 14

Nurmijarvi, Finland (60.5° N, 24.6° E) February 1960

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		(3.2)	3						----
01		(3.0)	5						(2.70)
02		(3.4)	6						(2.60)
03		(3.2)	4						----
04		(3.1)	9						(2.70)
05		(3.0)	6						(2.80)
06		(3.1)	8						(2.70)
07		3.2	12						2.75
08		5.2	16						3.10
09		7.0	21						3.10
10		8.9	23						3.10
11		10.4	26						3.10
12		11.2	25						3.10
13		12.0	27						3.10
14		12.1	25						3.15
15		11.2	22						3.10
16		10.4	22						3.10
17		9.8	22						3.10
18		9.2	16						3.10
19		7.8	12						3.10
20		(5.5)	8						(2.90)
21		(4.8)	8						(2.75)
22		(4.0)	7						(2.70)
23		(3.5)	3						----

Time: 30.0°E.
Sweep: 1.0 Mc to 25.0 Mc in 1 minute.

Table 15

Upsala, Sweden (59.8° N, 17.6° E) February 1960

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	fEs	(M3000)F2
00		3.8	20	290		110	(0.80)	2.2	2.65
01		3.7	22	295		105	0.80	2.2	2.6
02		3.2	21	300		105	0.80	2.3	2.6
03		3.0	22	295		105	0.90	2.2	2.6
04		2.8	24	280		110	0.85	2.3	2.6
05		2.8	26	275		110	0.85	2.2	2.7
06		3.0	26	260		110	0.90	2.2	2.7
07		4.2	28	255		110	1.40	2.4	2.9
08		6.1	29	235		110	1.80	2.8	3.1
09		8.0	29	230		110	2.20	3.0	3.1
10		9.1	29	225		(110)	2.45	3.8	3.2
11		10.8	29	225		(110)	2.65	4.3	3.1
12		11.2	29	230		(110)	2.70	3.3	3.1
13		11.9	29	230		(110)	2.65	2.9	3.1
14		11.8	28	225		(110)	2.60	3.0	3.1
15		11.0	28	225		(115)	2.30	2.8	3.1
16		9.8	28	220		<120	2.00	2.6	3.1
17		9.1	28	215		110	1.50	2.5	3.1
18		8.2	27	215		105	1.00	2.2	3.05
19		6.8	28	225		110	0.90		3.0
20		5.2	26	240		105	0.90		2.8
21		4.4	25	260		110	(0.90)		2.7
22		3.9	21	280		105	(0.90)		2.6
23		3.6	18	300		105	(0.85)		2.6

Time: 15.0°E.
Sweep: 0.3 Mc to 20.0 Mc in 3 minutes, automatic operation.
Occasionally, 1.4 Mc to 17.0 Mc in 6 minutes, automatic operation.

Table 16

DeBilt, Holland (52.1° N, 5.2° E) February 1960

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	fEs	(M3000)F2
00		4.4	23	<300					2.80
01		4.2	25	<320					2.80
02		4.2	23	(320)					2.70
03		3.9	26	<330					2.80
04		3.7	24	(300)					2.80
05		3.4	24	(280)					3.00
06		3.5	23	<295					3.00
07		(5.7)	26	230		---	---		3.25
08	---	8.4	28	220	---	---	2.5	<2.8	3.35
09	---	10.0	27	220	---	---	2.9	<3.0	3.25
10	(245)	11.0	24	220	---	---	3.1		3.25
11	(240)	11.3	25	220	---	120	3.3	<4.0	3.15
12	(250)	11.7	25	240	---	---	3.3	<4.0	3.20
13	---	11.0	20	230	---	---	3.2	<3.5	3.20
14	---	(11.5)	21	230	---	---	3.0	<3.7	3.20
15	---	(11.0)	23	230	---	---	2.8	<3.0	3.20
16	---	10.5	26	225	---	---	2.4	<2.7	3.20
17		(10.2)	20	220		---	---		(3.10)
18		(8.9)	23	220					(3.15)
19		(7.0)	18	230					(3.15)
20		(6.0)	21	(250)					(3.00)
21		5.1	20	<275					2.95
22		(4.8)	25	(280)					2.90
23		(4.7)	23	<300					(2.85)

Time: 0.0°.
Sweep: 1.4 Mc to 16.0 Mc in 40 seconds.

Table 17

Winnipeg, Canada (49.9° N, 97.4° W) February 1960

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		4.6	27	280					(2.85)
01		4.5	27	290					(2.85)
02		3.9	27	300					(2.90)
03		4.0	28	310					(2.80)
04		4.0	26	300					(2.80)
05		4.0	25	290					(2.85)
06		3.8	24	300					(2.70)
07		3.8	27	290					----
08		5.5	27	250		120	1.90		3.20
09		7.2	26	230		115	2.40		3.20
10		8.3	25	225		110	2.80		3.05
11	(275)	9.8	28	230		110	3.00		2.95
12	---	10.6	27	230		110	3.20		(3.00)
13	---	11.1	26	225		110	3.10		(3.00)
14	---	11.7	25	230		110	3.00		(3.00)
15	---	11.8	25	230		110	3.00		(3.00)
16		11.5	25	230		110	2.60		----
17		11.0	28	230		120	2.10		----
18		10.5	27	220		---	----		----
19		9.0	28	220					(3.05)
20		7.8	29	220					3.00
21		6.3	27	230					3.00
22		5.2	27	240					3.00
23		4.8	26	250					(3.00)

Time: 90.0°W.
Sweep: 1.6 Mc to 20.0 Mc in 15 seconds.

Table 18

Sottens, Switzerland (46.6° N, 6.7° E) February 1960

Time	h'F2	foF2—Count		h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	280	5.0	22						2.8
01	270	5.1	26						2.8
02	300	4.7	28						2.75
03	300	4.7	28						2.8
04	300	4.6	28						2.8
05	280	4.5	28						2.8
06	240	4.0	28						2.9
07	230	4.2	27						3.0
08	220	7.0	26			120	1.9		3.2
09	210	9.0	19			100	2.5		3.25
10	210	9.5	21			100	2.8		3.25
11	200	10.0	18			100	3.1		3.3
12	210	10.3	15			100	3.2		3.2
13	210	9.8	12			100	3.3		(3.25)
14	210	9.7	14			100	3.2		(3.2)
15	210	9.6	12			100	3.0		----
16	220	9.5	14			100	2.8		----
17	210	9.0	15			110	2.3		----
18	200	7.9	15			---	---		----
19	210	7.5	17						3.3
20	220	7.0	20						3.15
21	220	6.1	25						3.0
22	250	5.6	19						2.9
23	250	5.3	23						2.9

Time: 15.0°E.
Sweep: 1.0 Mc to 25.0 Mc in 30 seconds.

Table 19

Ottawa, Canada (45.4° N, 75.9° W) February 1960

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		5.1	29	270					2.8
01		5.0	29	290					2.8
02		4.6	29	295					(2.6)
03		4.4	29	295					---
04		4.3	29	290					(2.9)
05		4.1	29	280					(2.8)
06		4.0	27	270					---
07		5.0	29	260		---	1.8		(3.0)
08		7.5	29	235		115	2.4		3.3
09		9.5	29	230		110	2.8		3.3
10	---	10.2	29	220	---	110	3.0		3.1
11	(250)	11.1	29	220	---	110	3.3		3.1
12	(290)	12.0	29	220	(5.0)	110	3.3		3.0
13	---	12.2	29	220	---	110	3.3		3.0
14	---	12.2	29	225	---	110	3.2		3.0
15	---	12.1	29	240	---	110	3.0		3.0
16	---	12.0	29	240		115	2.7		3.0
17		11.2	29	230		130	2.0		(3.0)
18		10.2	29	230		---	---		---
19		9.0	29	230					(3.0)
20		8.0	28	230					(2.9)
21		7.0	28	250					3.0
22		6.0	28	255					(3.0)
23		5.6	28	260					(3.0)

Time: 75.0°W.
Sweep: 1.0 Mc to 20.0 Mc in 16 seconds.

Table 20

Wakkanai, Japan (45.4° N, 141.7° E) February 1960

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		5.0	28	300					2.65
01		5.0	28	280					2.65
02		4.8	27	290					2.65
03		4.7	27	300					2.60
04		4.5	27	290					2.65
05		4.4	28	290					2.60
06		4.8	28	260					2.85
07		7.6	28	230			2.00		3.20
08		10.3	27	220			2.50		3.20
09		11.8	27	225			2.90		3.15
10		12.6	26	225			3.15		3.05
11		13.0	26	230			3.35		3.05
12		12.8	26	230			3.35		3.05
13		12.5	27	230			3.30		3.00
14		12.2	28	235			3.10		3.05
15		11.3	28	230			2.75		3.00
16		11.2	28	230			2.20		3.05
17		9.6	28	220					3.00
18		8.0	28	220					2.95
19		6.8	28	230					3.00
20		5.8	28	245					2.90
21		5.3	28	260					2.80
22		5.2	28	290					2.70
23		5.2	28	300					2.70

Time: 135.0°E.
Sweep: 1.0 Mc to 20.7 Mc in 1 minute.

Table 21

Genoa (Monte Capellino), Italy (44.6° N, 9.0° E) February 1960

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		5.8	28	290					
01		5.8	28	280					
02		5.6	28	295					
03		5.4	28	305					
04		5.2	27	300					
05		5.1	27	280					
06		4.4	26	260					
07		4.8	27	255					
08		8.3	27	240			1.8		
09		11.0	29	230			2.5	2.5	
10		11.6	29	230			3.0	3.0	
11		12.2	27	230			3.2	3.3	
12		12.7	25	230			3.4		
13		12.4	26	230			3.4		
14		12.4	26	230			3.3		
15		12.5	27	235			3.1		
16		12.6	27	240			2.7	2.8	
17		11.4	27	235			2.1	2.5	
18		10.4	27	230			1.6		
19		9.2	27	235					
20		7.8	28	250					
21		6.7	28	250					
22		6.4	28	265					
23		6.0	28	275					

Time: 15.0°E.
Sweep: 1.0 Mc to 20.0 Mc in 5 minutes, automatic operation.

Table 22

Rome, Italy (41.8° N, 12.5° E) February 1960

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		(5.5)	24	280					2.75
01		(5.5)	22	280					(2.70)
02		(5.3)	23	290					(2.70)
03		(5.1)	22	300					(2.70)
04		(5.2)	23	290					(2.70)
05		(5.0)	23	260					(2.75)
06		(4.5)	22	260					(2.90)
07		(6.1)	21	240		---	1.8		(3.10)
08		(9.3)	9	240		130	2.4		(3.30)
09		(11.6)	10	230		120	2.9		(3.30)
10		(12.6)	16	230		110	3.2		(3.20)
11		(12.5)	17	220		110	3.4		(3.15)
12		(12.6)	18	220		110	3.5		(3.00)
13		(12.7)	17	230		110	3.6		(3.05)
14		(12.4)	18	240		110	3.4		(3.00)
15		(12.5)	17	240		110	3.2		(3.00)
16		(12.2)	18	240		120	2.8		(3.10)
17		(12.7)	4	240		130	2.2	2.2	----
18		(9.4)	9	220		---	---		(3.20)
19		(9.0)	9	240					(3.00)
20		(8.0)	15	240					(3.00)
21		(6.5)	14	240					(3.05)
22		(5.7)	16	260					(2.80)
23		(5.8)	20	260					(2.70)

Time: 15.0°E.
Sweep: 1.4 Mc to 15.0 Mc in 5 minutes, automatic operation.

Table 23

Akita, Japan (39.7° N, 140.1° E) February 1960

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		5.0	29	290					2.70
01		4.9	29	290					2.75
02		4.7	29	290					2.70
03		4.6	29	300					2.65
04		4.6	29	290					2.65
05		4.5	29	295					2.65
06		4.9	29	270					2.90
07		8.4	29	240			2.10		3.25
08		10.8	29	225			2.65		3.30
09	---	11.6	28	225			3.05		3.15
10	(245)	12.6	28	230			3.30		3.05
11	(250)	13.6	28	220			3.50		3.00
12	250	13.6	28	235			3.55		3.00
13	(245)	13.1	28	230			3.50		3.00
14	---	12.6	28	230			3.30		3.00
15	---	12.0	28	240			3.00		3.00
16		11.5	29	240			2.45		3.10
17		10.5	29	225					3.10
18		0.7	29	220					3.10
19		7.4	29	240					3.05
20		6.2	29	245					3.00
21		5.6	29	250					2.85
22		5.1	29	280					2.75
23		5.1	29	290					2.75

Time: 135.0°E.
Sweep: 1.6 Mc to 20.0 Mc in 20 seconds.

Table 24

Tokyo, Japan (35.7° N, 139.5° E) February 1960

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		(4.8)	27	300					(2.75)
01		4.9	27	300					2.75
02		4.5	27	300					2.70
03		4.3	26	<305					2.70
04		4.2	26	<310					2.60
05		4.0	26	340					2.60
06		4.6	26	300					2.75
07		(8.4)	26	245			----		(3.20)
08		11.0	26	240			(2.90)		3.25
09	---	11.6	28	230			(3.15)		3.10
10	---	12.8	29	235			(3.40)		3.10
11	270	13.5	29	230			(3.60)		2.95
12	270	13.8	27	235			(3.65)		2.95
13	---	13.0	26	235			3.60		2.95
14	---	12.8	27	240	---		3.50		2.95
15	---	12.6	29	240			3.10		2.95
16		11.6	28	240			(2.50)		3.00
17		10.8	27	230			----		3.05
18		(9.2)	27	230					(3.05)
19		(7.2)	27	250					2.90
20		6.5	27	250					2.95
21		(6.0)	27	255					(2.90)
22		5.4	27	300					2.75
23		5.3	27	305					2.70

Time: 135.0°E.
Sweep: 1.0 Mc to 20.0 Mc in 20 seconds.

Table 25

Yamagawa, Japan (31.2° N, 130.6° E) February 1960

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		6.2	25	275					2.75
01		5.9	26	255					2.80
02		5.3	27	260					2.75
03		4.8	28	270					2.80
04		4.4	28	250					2.80
05		3.9	28	300					2.65
06		4.0	28	318					2.65
07		6.4	27	255			----		3.00
08		9.9	27	240			2.50		3.25
09		11.4	29	240			3.10		3.20
10		13.0	29	235			3.40		3.05
11		13.5	29	230			3.65	3.6	3.05
12		14.1	29	225			3.70		2.95
13		14.6	28	230			3.75		2.90
14		14.6	26	235			3.70		2.90
15		14.3	25	240			3.50	3.5	2.85
16		13.2	25	240			3.10		2.90
17		12.7	26	245			2.50		2.95
18		11.9	26	230					3.00
19		10.5	27	230					3.80
20		(9.3)	25	240					(2.90)
21		9.1	23	240					2.90
22		8.1	25	250					2.75
23		6.7	25	265					2.75

Time: 135.0°E.
Sweep: 1.0 Mc to 20.3 Mc in 30 seconds.

Table 26

Bunia, Belgian Congo (1.5° N, 30.2° E) February 1960

Time	h'F2	foF2—Count		h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	260	9.1	16					1.5	2.58
01	260	9.1	19					1.5	2.67
02	240	9.0	24					1.6	2.84
03	220	8.3	26					2.0	3.04
04	220	5.0	23	---	---			2.0	3.14
05	250	8.6	28	250	---	125	2.5	3.0	2.96
06	---	10.1	26	240	---	115	3.0	3.3	2.80
07	---	11.0	27	230	---	110	3.5		2.45
08	---	11.6	25	220	---	118	3.9		2.31
09	---	12.4	22	250	---	110	4.0		2.21
10	---	13.1	19	240	---	110	4.0		2.27
11	---	13.4	22	260	---	110	4.0		<2.22
12	---	13.2	22	250	---	110	4.0		2.14
13	(485)	13.2	23	250	---	110	3.6		2.06
14	(490)	13.4	20	240	---	115	3.3		2.14
15	---	13.3	15	250	---	120	2.8		2.17
16	---	(13.2)	8	275	---	---	---		(2.15)
17	350	>13.5	5						<1.97
18	370	(13.4)	3						----
19	300	>13.4	3						----
20	240	(14.3)	3						----
21	220	(13.3)	5						(2.77)
22	220	>10.8	7						<2.72
23	258	9.3	11						2.55

Time: 0.0°.
Sweep: 1.0 Mc to 20.0 Mc in 7 seconds.

Table 27

Leopoldville, Belgian Congo (4.4° S, 15.2° E) February 1960

Time	h'F2	foF2—Count		h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	250	>8.1	6						(2.58)
01	260	(8.5)	7						(2.48)
02	250	8.2	10						<2.62
03	240	7.5	15						2.67
04	230	6.5	22					1.4	2.92
05	240	5.5	25			130	---	2.0	2.83
06	250	8.3	17	250		120	2.5	2.6	2.99
07	260	>9.1	24	230		115	3.2		2.84
08	(280)	9.9	17	225		110	3.6		2.55
09	(295)	11.0	19	225		110	3.9		2.34
10	---	>11.5	8	240		110	---		<2.29
11	(350)	>13.0	10	240		110	---		2.30
12	395	13.2	16	---		110	---		2.26
13	400	>13.0	22	240	---	110	4.0		<2.25
14	410	14.0	22	235	---	115	3.6		<2.27
15	395	14.4	19	245		115	3.4	3.6	2.26
16	(385)	>13.9	10	250		120	2.8		<2.34
17	(275)	(13.6)	6	275		140	---	2.0	<2.40
18	320	>14.1	3					2.8	----
19	310	----	0						
20	260	(14.0)	1						----
21	230	(14.5)	4						----
22	220	14.3	15						2.77
23	220	(13.5)	6						(2.71)

Time: 0.0°.
Sweep: 1.0 Mc to 20.0 Mc in 7 seconds.

Table 28

Elisabethville, Belgian Congo (11.6° S, 27.5° E) February 1960

Time	h'F2	foF2—Count		h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	250	>6.5	15						2.58
01	280	6.4	17						2.59
02	255	6.0	28						<2.75
03	255	5.5	22						2.70
04	275	5.4	20					2.0	2.70
05	255	8.4	14	250	---	130	2.4	1.7	2.90
06	280	9.4	21	240	---	120	3.0		2.88
07	(290)	10.1	21	240	---	115	3.5		2.68
08	(300)	10.6	20	240	---	110	3.9		2.56
09	320	11.1	21	230	---	110	4.0		2.50
10	(340)	11.6	18	230	---	110	---		2.48
11	340	12.2	21	---	---	110	---		2.42
12	360	12.4	19	240	---	110	4.0		2.46
13	350	12.5	22	250	---	110	3.8		2.30
14	350	12.2	19	250	---	115	3.5		2.40
15	330	12.4	18	250	---	120	3.0	3.6	2.46
16	(280)	12.4	18	270	---	125	2.4	2.8	2.50
17	275	(12.2)	9					2.3	(2.54)
18	280	>11.8	4					2.0	----
19	270	(12.1)	8					1.8	(2.60)
20	250	11.6	14						2.64
21	250	10.8	16						2.68
22	250	9.5	14						2.70
23	240	8.4	10						2.58

Time: 0.0°.
Sweep: 1.0 Mc to 20.0 Mc in 7 seconds.

Table 29

La Paz, Bolivia (16.5° S, 68.1° W) February 1960

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		>9.0	7					2.6	----
01		(8.8)	9					2.8	(3.00)
02		(8.5)	8					2.8	(2.90)
03		8.1	11					3.3	2.90
04		7.8	13					3.3	2.88
05		7.8	13					2.9	2.95
06		0.3	15				----		3.10
07		>10.0	18				2.45		3.12
08		11.6	20				3.05	4.2	3.00
09		(12.75)	20				(3.50)	6.0	(2.85)
10		13.2	21				----	7.3	(2.65)
11		(13.55)	20				----	7.4	(2.48)
12		(13.4)	21				----	7.5	(2.35)
13		>13.0	21				----	7.6	(2.30)
14		>12.8	21		---		----	7.4	(2.32)
15		(12.8)	20		---		(3.95)	7.2	(2.32)
16		(12.3)	20		---		(3.70)	6.6	(2.30)
17		(12.6)	21				(3.20)	6.0	(2.35)
18		(11.5)	19				(2.70)	5.6	(2.40)
19		>10.0	19				1.80	3.8	(2.30)
20		9.0	19						(2.20)
21		(0.9)	11						(2.25)
22		(9.5)	9						(2.60)
23		(10.8)	8						(2.60)

Time: 60.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 30

Nurmijarvi, Finland (60.5° N, 24.6° E) December 1959

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		----	0						
01		(2.4)	2						----
02		(2.6)	2						----
03		(3.0)	4						----
04		(2.6)	2						----
05		(2.4)	5						(2.80)
06		(2.4)	6						(2.90)
07		(2.9)	7						(2.90)
08		3.0	10						2.80
09		5.6	13						3.05
10		7.5	19						3.20
11		9.5	23						3.20
12		10.7	26						3.15
13		11.5	24						3.20
14		10.7	25						3.20
15		10.0	19						3.20
16		8.8	19						3.10
17		7.5	13						3.20
18		5.2	13						3.10
19		(3.7)	7						(3.10)
20		(3.0)	8						(2.90)
21		(3.3)	5						(2.90)
22		(2.6)	4						----
23		(2.7)	1						----

Time: 30.0°E.
Sweep: 1.0 Mc to 25.0 Mc in 1 minute.

Table 31

Macau (22.2° N, 113.6° E) November 1959

Time	h'F2	foF2—Count		h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	350	(13.5)	5						(2.55)
01	390	(13.2)	6						(2.35)
02	370	(10.5)	8						(2.60)
03	350	9.2	15						2.40
04	340	(8.4)	8						(2.40)
05	380	----	0						----
06	(455)	(8.0)	1						----
07	445	8.8	18			195	2.4		2.15
08	430	10.6	28	---	---	180	2.8	3.3	2.50
09	425	13.1	26	425	8.0	170	3.0	4.0	2.40
10	500	14.4	28	400	8.0	170	3.3	3.8	2.40
11	600	14.6	25	400	9.0	---	---	3.2	2.20
12	600	14.8	25	390	8.5	---	---		2.20
13	600	14.8	24	400	9.0	---	---		2.20
14	600	15.0	22	400	8.4	---	---		2.10
15	570	14.8	23	400	8.2	170	3.0	4.5	2.15
16	560	14.9	14	430	8.0	175	2.9	4.0	2.20
17	440	14.8	10			---	---	3.2	2.20
18	460	(15.0)	2			---	---	2.8	----
19	470	(14.8)	2						----
20	435	----	0						
21	400	(14.8)	2						----
22	365	(14.8)	7						2.50
23	365	(15.0)	5						2.40

Time: 120.0°E.
Sweep: 1.6 Mc to 20.0 Mc in 15 seconds.

Table 32

Falkland Is. (51.7° S, 57.8° W) November 1959

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		9.1	30	300				<1.4	2.45
01		9.1	29	310					2.4
02		8.9	29	305					2.4
03		8.7	29	310		---	----		2.45
04	---	8.9	29	295	---	---	1.20		2.45
05	445	9.8	28	250	---	115	2.20		2.45
06	380	10.2	28	245	---	110	2.75	3.1	2.55
07	425	10.6	27	245	5.1	105	3.20	3.4	2.5
08	385	10.7	28	240	5.2	105	3.40	3.9	2.55
09	350	10.8	30	230	5.2	105	3.70	4.3	2.55
10	400	11.5	30	235	5.6	105	3.80	4.3	2.6
11	340	11.7	29	230	---	105	3.80	4.5	2.65
12	330	11.8	28	220	5.6	105	3.90	4.3	2.7
13	330	11.2	28	230	5.6	105	3.80	4.2	2.75
14	390	10.8	26	230	5.3	105	3.70	4.0	2.8
15	320	10.6	27	235	---	105	3.50	3.8	2.8
16	300	10.3	28	240	---	105	3.30	3.4	2.9
17		9.8	30	250		110	2.90	2.9	2.9
18		9.6	30	255		115	2.40	2.7	2.9
19		9.0	30	260		---	1.70	2.6	2.85
20		8.6	30	270				1.8	2.55
21		9.0	30	300				2.7	2.45
22		9.2	30	300				<1.4	2.4
23		9.2	30	305				<1.4	2.35

Time: 60.0°W.
Sweep: 0.67 Mc to 25.0 Mc in 5 minutes, automatic operation.

Table 33

Natal, Brazil (5.3° S, 35.1° W) October 1959

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		(9.8)	18	215					(3.10)
01		(9.2)	22	220					(3.15)
02		8.5	19	235					3.00
03		(8.2)	25	240					(3.02)
04		7.4	23	230				2.0	3.20
05		6.6	25	220					3.15
06		7.0	23	240		---	1.60	3.2	3.15
07		10.3	23	240		113	2.70	4.0	3.20
08		11.8	23	225		107	3.30	4.5	3.00
09		12.8	24	215		(107)	3.65	6.6	2.75
10		13.4	23	210		(107)	3.90	7.4	2.58
11		13.4	25	<205		---	4.02	8.0	2.40
12	---	13.05	24	200	---	(107)	4.15	8.4	2.35
13	---	13.1	25	195		(107)	(4.05)	7.8	2.35
14	---	13.6	25	200		(107)	3.92	7.8	2.35
15	---	14.5	25	210		(107)	3.70	6.6	2.40
16	---	14.55	26	225		(109)	3.35	6.0	2.40
17	---	14.5	25	245		109	2.88	5.8	2.30
18		13.2	23	280		---	2.00	4.2	2.20
19		(11.2)	22	395					(2.00)
20		(9.1)	6	420					(2.10)
21		(9.0)	3	380					----
22		(9.1)	3	315					----
23		(9.3)	12	230					(2.95)

Time: 30.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 32.4 seconds.

Table 34

Falkland Is. (51.7° S, 57.8° W) October 1959

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		7.8	28	315					2.40
01		7.8	20	320					2.45
02		7.7	28	300					2.50
03		7.5	27	295					2.50
04		7.1	27	280		---	E		2.40
05		8.0	27	255		---	E		2.55
06		8.8	27	240		120	2.30		2.90
07		9.4	27	235		110	2.90		2.90
08		11.0	26	240		110	3.25	3.4	2.80
09		12.0	28	230		105	3.45	3.7	2.90
10		12.9	29	230		105	3.60	3.8	2.95
11		12.8	28	230		105	3.70	3.9	2.85
12		12.8	28	225		105	3.70	3.7	2.85
13		13.0	28	225		105	3.70		2.90
14		12.4	28	235		105	3.50		2.90
15		11.5	27	235		105	3.30		2.95
16		10.8	27	245		110	3.00		2.95
17		10.1	28	250		120	2.55		3.05
18		9.4	28	250		120	2.00	2.4	2.95
19		0.7	27	250		---	E	<1.3	2.00
20		8.3	29	260				<1.4	2.60
21		8.1	29	260				<1.4	2.50
22		0.0	29	290				<1.4	2.50
23		8.1	29	300				<1.4	2.45

Time: 60.0°W.
Sweep: 0.67 Mc to 25.0 Mc in 5 minutes, automatic operation.

Table 35

Budapest, Hungary (47.4° N, 19.2° E) September 1959

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	fEs	(M3000)F2
00		5.8	26	325					
01		5.5	24	315					
02		>5.2	26	315					
03		4.9	25	310					
04		>4.8	24	295		---	---	1.7	
05		6.0	27	<260		120	2.2	3.0	
06	---	>7.0	28	240	---	110	2.8	3.5	
07	200	7.2	29	225	4.4	110	3.1	3.7	
08	290	8.5	26	220	4.9	110	3.4		
09	200	9.0	30	220	5.1	105	3.5	3.7	
10	310	9.3	29	220	5.4	105	3.5	3.7	
11	295	9.5	29	220	5.6	105	3.6		
12	320	9.6	29	225	5.8	105	3.6		
13	---	>9.3	29	225	---	105	3.4		
14	---	>9.2	28	235	---	110	3.2	3.4	
15		>9.1	28	240		100	2.9	3.4	
16		9.0	29	245		120	2.2	3.3	
17		8.8	24	250		---	---	3.0	
18		0.4	24	250				2.0	
19		7.3	23	250					
20		6.8	25	260					
21		6.2	27	295					
22		6.0	24	325					
23		6.0	27	330					

Time: 0.0°.
Sweep: 1.0 Mc to 20.0 Mc in 35 seconds.

Table 36

Bunia, Belgian Congo (1.5° N, 30.2° E) September 1959

Time	h'F2	foF2—Count		h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	255	(10.3)	8					2.0	(2.66)
01	230	(10.9)	6					2.0	(2.68)
02	225	9.2	10					2.0	<2.84
03	225	(8.1)	6					2.4	(3.06)
04	260	7.0	13			---	---	3.0	2.96
05	260	10.8	22	250	---	120	3.0	4.0	2.87
06	(275)	12.4	23	240	---	110	3.4	4.4	2.66
07	---	13.5	28	230	---	110	3.8	4.8	2.52
08	---	14.0	27	255	---	110	4.0	5.0	2.29
09	(440)	14.4	25	250	---	110	4.0		2.19
10	(460)	14.5	25	270	---	110	4.0		2.11
11	(440)	14.4	19	250	---	110	4.0		2.09
12	---	14.2	22	250	---	110	4.0		<2.09
13	515	14.3	21	250	---	110	4.0		2.04
14	(510)	14.2	14	250	---	115	3.4		2.04
15	---	13.9	10	265	---	120	2.6		<2.04
16	300	(13.8)	4	300	---			3.0	----
17	390	(12.9)	3					2.0	----
18	340	----	0					2.0	
19	270	----	0						
20	230	----	0					2.0	
21	225	>9.1	3					2.0	----
22	225	(11.5)	1						----
23	250	(10.8)	5						(2.51)

Time: 0.0°.
Sweep: 1.0 Mc to 20.0 Mc in 7 seconds.

Table 37

Leopoldville, Belgian Congo (4.4° S, 15.2° E) September 1959

Time	h'F2	foF2	Count	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	220	10.8	10						2.64
01	245	(10.2)	12						2.68
02	240	0.6	13					1.4	2.75
03	235	7.8	14					1.9	2.88
04	230	5.6	20					2.0	2.91
05	255	7.0	22			130	---	2.7	2.86
06	250	10.0	21	240	---	120	2.8	3.6	2.90
07	---	11.0	27	235	---	115	3.4	3.8	2.62
08	(285)	12.2	30	235	---	110	3.8	4.8	2.47
09	---	12.8	29	250	---	110	4.0	4.9	2.41
10	(350)	13.4	26	250	---	110	---		2.32
11	(370)	14.0	30	245	---	110	---		2.30
12	385	14.0	29	240	---	110	---		2.23
13	415	14.0	30	245	---	110	4.0		2.19
14	430	14.3	28	250	6.0	115	3.6		2.19
15	(400)	14.4	26	250	---	115	3.2	3.7	<2.23
16	---	14.6	25	260	---	120	2.6	3.4	2.26
17	290	>15.0	17	---	---			3.1	2.35
18	325	14.4	3					2.8	----
19	285	----	0						
20	230	----	0					1.8	
21	220	>15.0	1						----
22	220	(16.7)	9						<2.64
23	220	13.6	11						2.71

Time: 0.0°.
Sweep: 1.0 Mc to 20.0 Mc in 7 seconds.

Table 38

Elisabethville, Belgian Congo (11.6° S, 27.5° E) September 1959

Time	h'F2	foF2	Count	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	260	5.5	21						2.55
01	280	5.6	25					1.4	2.56
02	260	5.0	26						2.78
03	250	4.8	25					1.5	2.88
04	270	5.4	22			---	---		2.81
05	250	9.3	27	250	---	125	2.6		3.00
06	255	10.8	26	240	---	115	3.2		2.08
07	(275)	11.5	26	235	---	110	3.6		2.68
08	280	12.3	28	230	---	110	3.9		2.58
09	(310)	12.5	27	250	---	110	4.0		2.54
10	(315)	12.4	28	250	---	110	4.0		2.46
11	370	12.1	28	250	---	110	4.0		2.36
12	370	12.2	29	250	6.0	110	3.9		2.31
13	365	12.5	27	250	---	110	3.7		2.31
14	(345)	12.6	29	250	---	115	3.3		2.34
15	---	12.9	29	260	---	120	2.7	3.4	2.45
16	280	12.9	20	---	---	---	---	2.8	2.52
17	275	(12.7)	5					2.9	(2.54)
18	260	12.9	14					2.5	<2.66
19	240	12.7	15					2.5	2.69
20	230	11.2	10					2.5	2.71
21	240	10.6	22					1.3	2.78
22	230	9.1	19					1.4	2.80
23	230	6.5	23					1.5	2.71

Time: 0.0°.
Sweep: 1.0 Mc to 20.0 Mc in 7 seconds.

Table 39

Formosa, China (25.0° N, 121.5° E) July 1959

Time	h'F2	foF2	Count	h'F	foF1	h'E	foE	foEs	(M3000)F2
00		12.2	26	310				2.8	2.65
01		12.2	27	270				2.1	2.85
02		9.5	29	250					2.80
03		8.9	27	260					2.70
04		8.0	28	<280					2.55
05		7.2	26	200					2.70
06		8.2	28	250				3.4	2.90
07		9.2	29	240				4.4	2.95
08		9.4	29	240				5.2	2.80
09	(420)	9.8	29	240	(6.20)			5.3	2.65
10	---	10.8	30	(240)	----			6.4	2.45
11	(400)	>11.5	28	(240)	(6.20)			5.8	2.50
12	400	>12.4	26	<200	(6.20)			5.6	2.55
13	410	13.0	29	<300	6.00			5.5	(2.55)
14	400	>13.4	29	<250	6.00			>5.0	2.60
15	380	13.2	30	(250)	(5.80)		---	5.0	(2.65)
16	360	13.6	30	(240)	----		---	5.0	(2.70)
17	---	14.2	30	<260			---	4.9	2.70
18		>14.0	27	(280)				4.8	2.70
19		13.5	29	290				4.4	(2.65)
20		12.2	30	300				3.4	(2.55)
21		11.8	28	320				3.0	2.45
22		11.3	27	340				2.8	2.50
23		>12.0	26	320				2.4	(2.50)

Time: 120.0°E.
Sweep: 1.1 Mc to 19.5 Mc in 15 minutes, manual operation.

Table 40

Byrd Station (80.0° S, 120.0° W) April 1959

Time	h'F2	foF2	Count	h'F	foF1	h'E	foE	foEs	(M3000)F2
00		(5.2)	10	345		---	----	2.8	----
01		(6.2)	10	360		---	----	2.8	----
02		(5.45)	10	350		---	----	3.1	(2.55)
03		(5.6)	18	(370)		---	----	>3.1	2.30
04		(6.65)	14	(310)		---	----	2.4	(2.50)
05		5.7	10	(310)		---	----		2.60
06		(5.7)	16	280				>1.9	(2.60)
07		6.0	21	<275					2.78
08		6.65	26	265		---	----		2.80
09		7.8	26	<270		---	----		2.85
10		8.8	25	255		---	----		2.95
11		9.45	26	255		---	----		2.95
12		>10.0	24	250		---	----		3.00
13		0.0	23	270		<133	>2.00		2.98
14		(7.7)	19	290		---	----		2.92
15		>5.45	20	310		---	----	2.9	2.88
16		(5.0)	21	305		---	----	3.0	2.72
17		5.85	14	320		---	----	3.5	(2.62)
18		(6.05)	12	360		---	----	3.0	----
19		>7.5	11	330		---	----	>3.1	----
20		>5.9	12	320				3.6	(2.50)
21		(7.0)	3	325				3.7	----
22		(6.0)	8	330				3.1	----
23		(6.65)	8	<355				3.0	----

Time: 120.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 41

Pole Station (90.0° S) April 1959

Time	h'F2	foF2	Count	h'F	foF1	h'E	foE	foEs	(M3000)F2
00		(6.7)	21	250				3.3	(2.70)
01		(6.8)	17	265				3.5	(2.70)
02		(6.8)	23	265		---	----	1.8	(2.60)
03		(7.0)	25	280		---	----		(2.50)
04		(7.15)	20	270		---	----		(2.50)
05		(7.5)	22	270		---	----		(2.58)
06		(7.0)	17	300		---	----		(2.58)
07		(5.6)	21	300		---	----		(2.30)
08		(6.15)	18	330		---	----	2.0	(2.42)
09		(5.1)	26	<320		---	----	2.9	(2.40)
10		(4.7)	21	320		---	(2.05)	2.8	(2.45)
11		(4.9)	18	(325)		113	2.20	3.0	(2.50)
12		(4.7)	17	325		104	(2.50)	2.8	(2.50)
13		(5.05)	20	320		109	2.50		(2.58)
14		(5.3)	27	315		113	2.40		(2.68)
15		(6.0)	25	285		107	2.35		(2.70)
16		(8.0)	19	270		109	1.98		(2.75)
17		(7.2)	19	280		135	(1.80)	2.0	(2.70)
18		(4.7)	15	255		---	----	2.0	(2.68)
19		(4.2)	11	300		---	----	3.6	(2.70)
20		(3.9)	13	(255)		---	----	3.7	(2.65)
21		(3.7)	12	270		129	1.90	4.2	(2.80)
22		(4.2)	18	230		---	----	3.4	(2.80)
23		(5.2)	19	255		---	----	2.6	(2.65)

Time: 0.0°.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 42

Byrd Station (80.0° S, 120.0° W) March 1959

Time	h'F2	foF2	Count	h'F	foF1	h'E	foE	foEs	(M3000)F2
00		6.25	16	300		---	----	3.0	2.35
01		(6.0)	19	380		---	----	2.7	2.38
02	---	6.7	20	365		---	----	3.0	2.38
03	---	6.35	16	350		---	----	3.0	2.45
04	---	6.8	17	315		---	----		2.55
05	---	6.6	19	275		---	----		2.70
06	---	7.0	21	265		125	2.00		2.80
07	---	7.0	22	260		---	----		2.85
08	---	7.15	26	255		<127	2.15		2.80
09	---	7.65	26	250		125	2.45		2.85
10	---	8.5	25	255		121	2.45		2.90
11	---	8.6	26	255	---	118	2.48		2.80
12	---	9.4	25	250	---	115	2.50		2.85
13	---	8.8	25	260	---	(121)	2.50		2.80
14	---	9.3	25	260	---	119	2.50		2.85
15	---	7.5	25	265	---	124	2.48		2.85
16	---	7.4	27	295	---	(124)	2.40		2.75
17	---	7.7	25	310		131	2.62		2.75
18	---	7.8	18	310		<145	2.40	2.6	2.60
19	---	>7.1	18	305		---	----	3.3	(2.75)
20		7.15	16	335		---	----	3.1	(2.60)
21		(6.9)	15	310		---	----	2.6	2.38
22		7.05	14	340		---	----	3.0	(2.40)
23		(6.7)	15	370		---	----	>1.6	(2.32)

Time: 120.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 43

Pole Station (90.0° S) March 1959

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00	---	(6.5)	23	275		129	2.10	3.4	(2.80)
01	---	(6.75)	28	275		<131	2.00	3.2	(2.62)
02	---	(7.0)	29	275		<127	1.90	2.5	(2.58)
03	---	(7.1)	29	290	---	(129)	2.00	2.6	(2.55)
04	---	(7.55)	26	285	---	129	2.00		(2.50)
05	---	(7.05)	26	280	---	121	2.00		(2.50)
06	(470)	(6.75)	28	290	---	<134	(2.00)		(2.40)
07	(480)	(7.3)	23	300	3.4	<145	----		(2.45)
08	(410)	(6.4)	23	<300	---	124	(2.10)		(2.40)
09	---	(6.4)	23	<300	---	119	----		(2.40)
10	(610)	(5.5)	23	310	---	117	2.60		(2.42)
11	---	(5.3)	22	310	---	117	2.60		(2.58)
12	---	(5.4)	25	310	---	113	2.65		(2.70)
13	---	(6.5)	22	300	---	119	2.60		(2.68)
14	---	6.45	24	290	---	119	2.70		2.80
15	---	7.1	26	280	---	<121	2.30		2.75
16	---	(0.2)	29	280	---	(116)	2.25		(2.70)
17	---	(7.15)	26	290	---	119	2.00		(2.65)
18		(6.3)	23	265		(123)	(2.10)		(2.90)
19		(5.95)	24	270		<127	2.02		(2.75)
20		(5.2)	23	280		<137	2.30	2.5	(2.75)
21		5.35	26	280		126	2.25	3.1	2.80
22		(5.75)	24	285		<134	2.25	2.6	(2.90)
23		(5.85)	22	275		<132	(2.15)	2.5	(2.65)

Time: 0.0°.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 44

Juliusruh/Rügen, Germany (54.6° N, 13.4° E) February 1959

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		4.6	23	<305			E		2.45
01		4.1	23	<310			E		2.40
02		3.8	23	<330			E	1.0	2.40
03		3.8	24	<315			E		2.40
04		3.5	26	<305			E		2.40
05		3.1	23	<300			E		2.50
06		3.4	24	<300			E		2.50
07		4.8	24	280			1.60		2.55
08		7.4	27	260			2.10		2.95
09		9.7	27	240			2.70		2.90
10		11.2	24	240			2.90		2.85
11		12.0	24	235			3.15		2.85
12		13.2	26	230			3.20		2.80
13		13.2	26	235			3.20		2.85
14		13.0	26	235			3.05		2.80
15		12.7	27	235			2.80		2.80
16		12.3	26	230			2.50		2.90
17		11.5	25	235			2.00		2.85
18		9.8	27	230			----		2.80
19		8.3	26	(230)					2.80
20		6.9	26	<250					2.80
21		5.8	26	<270					2.60
22		5.1	25	<295					2.55
23		5.0	24	<305					2.50

Time: 15.0°E.
Sweep: 0.5 Mc to 20.0 Mc in 20 seconds.

Table 45

Lindau/Harz, Germany (51.6° N, 10.1° E) February 1959

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	fEs	(M3000)F2
00		5.06	28	291					2.52
01		4.73	28	296					2.50
02		4.54	27	315					2.43
03		4.42	28	312					2.42
04		4.36	26	301					2.50
05		3.78	27	290					2.53
06		3.51	26	282					2.53
07		4.52	28	277		---	E		2.58
08		7.65	27	240		---	1.81	2.7	2.93
09		10.22	27	233		113	2.57	3.2	3.00
10		12.30	28	232		112	2.88	3.2	2.94
11	---	13.42	27	230	---	112	3.15	3.6	2.96
12	---	13.45	28	230	---	110	3.26	3.6	2.06
13	---	13.42	28	230	---	109	3.27	3.4	2.83
14	---	13.20	28	228	---	---	3.18		2.83
15		13.15	28	233		---	2.98		2.84
16		12.70	27	232		---	2.61	3.3	2.88
17		11.70	27	230		---	2.04	2.9	2.88
18		10.50	28	228		---	E	2.3	2.90
19		8.60	28	224					2.84
20		7.26	27	232					2.76
21		6.36	26	248					2.63
22		5.88	26	262					2.63
23		5.30	27	280					2.55

Time: 15.0°E.
Sweep: 1.0 Mc to 16.0 Mc in 4 minutes.

Table 46

Dourbes, Belgium (50.1° N, 4.6° E) February 1959

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		(4.8)	20	290				<1.6	(2.50)
01		4.8	18	310					2.45
02		4.6	20	300					2.50
03		(4.5)	20	290					(2.50)
04		3.9	19	290				<1.3	2.55
05		3.6	19	290				<1.6	2.60
06		4.1	19	280				<1.6	2.55
07		6.4	19	245		<127	1.65		2.90
08		(9.7)	19	230		115	2.35		(3.10)
09		11.8	19	225		113	2.80		3.05
10	---	12.5	20	230		111	3.10		3.00
11	---	12.9	21	225		115	3.25		2.95
12	---	13.1	20	230		113	3.30		2.90
13	---	12.8	21	225		115	3.25		2.85
14		12.6	22	230		115	3.10		2.85
15		12.3	21	230		115	2.75		2.90
16		11.6	22	230		121	2.20	2.4	2.95
17		10.6	21	230		---	<1.60	1.8	2.90
18		(9.4)	20	225				<1.6	(2.90)
19		(7.9)	22	225				<1.6	(2.80)
20		(6.8)	22	235				<1.6	(2.65)
21		(6.1)	20	255				<1.6	(2.65)
22		(5.4)	20	280				<1.6	(2.50)
23		(5.2)	19	280				<1.6	(2.50)

Time: 0.0°.
Sweep: 1.0 Mc to 25.0 Mc in 30 seconds.

Table 47

Budapest, Hungary (47.4° N, 19.2° E) February 1959

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	fEs	(M3000)F2
00		5.2	26	310					
01		4.8	28	330					
02		4.7	27	335					
03		4.4	28	330					
04		4.0	28	320					
05		4.2	25	320					
06		>6.0	27	255					
07	---	(9.2)	28	240	---	130	2.7		
08	---	>10.9	28	235	---	125	3.0		
09	---	13.0	28	240	---	125	3.2		
10	---	13.5	27	240	---	120	3.4		
11	---	>13.5	28	240	---	120	3.4		
12	---	>12.5	26	240	---	120	3.4		
13	---	(12.8)	28	240	---	125	3.2		
14	---	>11.5	28	245	---	130	2.9		
15	---	>10.0	28	245	---	135	2.6		
16		(8.8)	25	245					
17		>6.8	23	240					
18		>6.0	25	250					
19		>5.0	26	265					
20		>5.5	24	290					
21		5.2	27	305					
22		(4.7)	27	320					
23		5.0	28	315					

Time: 0.0°.
Sweep: 1.0 Mc to 20.0 Mc in 35 seconds.

Table 48

El Cerillo, Mexico (19.3° N, 99.5° W) February 1959

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00	230	6.7	25						2.95
01	250	5.8	25						2.90
02	245	5.4	24						2.90
03	235	5.4	24						3.00
04	230	4.2	24						2.85
05	(290)	3.7	24						2.55
06	(310)	3.8	24						2.65
07	280	5.4	23						2.70
08	215	10.0	24						3.25
09	230	12.4	24						3.15
10	220	13.6	25						3.10
11	215	14.1	24						3.05
12	210	13.9	22						2.85
13	210	13.4	23						2.75
14	215	13.4	23						2.75
15	225	13.2	25						2.70
16	220	12.8	25						2.70
17	230	12.5	26						2.80
18	230	11.8	26						2.90
19	230	11.4	25						2.95
20	230	10.0	26						2.95
21	230	9.0	26						2.90
22	240	8.7	25						2.90
23	230	7.8	25						3.10

Time: 90.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 18 seconds.

Table 49

Dakar, French W. Africa (14.8° N, 17.4° W) February 1959

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		>15.0	3	240		---	----	2.5	----
01		>14.8	3	220		---	E	2.2	
02		>12.4	5	215		---	E		----
03		>11.3	8	220		---	E	2.2	----
04		9.4	10	210		---	E	2.2	(3.15)
05		6.8	11	215		---	----		(3.10)
06		6.5	13	240		---	E	3.0	3.05
07		6.5	11	250		---	E	2.5	3.15
08		>10.1	10	250		120	2.20	2.8	(3.35)
09		(12.6)	5	230		105	3.05	(3.2)	(3.40)
10		(14.6)	6	220		100	3.50	3.6	(3.20)
11		(15.0)	2	(205)		100	3.80	3.8	----
12		(15.6)	5	(210)		105	4.00	(4.3)	----
13		>14.8	4	200		100	4.20		----
14		>14.9	2	<210		110	4.00		----
15		>15.0	4	210		110	4.00		----
16		>14.7	4	220		105	3.75		----
17		>14.7	4	230		110	3.50		----
18		(13.6)	2	245		110	2.85		----
19		----	0	285		---	2.00	3.0	----
20		>14.5	1	370		---	E	2.4	
21		0	1	345		---	----	2.2	
22		D	1	290		---	----	2.2	
23		>13.5	1	250		---	----	2.5	

Time: 0.0°.
Sweep: 1.2 Mc to 17.0 Mc.

Table 50

Ojibouti, French Somaliland (11.6° N, 43.2° E) February 1959

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		(11.0)	8	<255		---	----	(3.5)	----
01		11.5	10	245				3.5	(2.85)
02		(10.9)	10	235				3.5	(3.00)
03		9.0	15	230		---	----	3.5	(3.00)
04		7.6	19	230		---	----	3.5	3.10
05		6.2	20	230		---	----	3.5	3.20
06		5.2	21	230		---	----	2.1	3.25
07		8.6	26	260		130	2.15	3.5	(3.05)
08		>11.5	20	245		115	3.00	5.8	(2.85)
09	---	>12.0	11	230		110	(3.50)	(6.9)	(2.60)
10	---	>12.0	13	220		---	3.85	(9.0)	(2.45)
11	---	12.4	17	220	---	110	4.05	(8.4)	(2.30)
12	---	>11.8	18	215	---	---	(4.30)	(8.8)	2.30
13	---	12.2	21	215	---	---	(4.20)	(8.6)	2.20
14	---	12.8	17	220	---	---	(4.00)	(8.4)	(2.20)
15	---	(13.2)	17	230		---	(3.80)	(8.4)	(2.35)
16	---	>12.6	10	240		115	(3.45)	(7.0)	(2.25)
17		>12.5	13	250		---	(2.90)	(6.5)	(2.25)
18		>12.0	13	280		---	(1.90)	3.6	(2.05)
19		>11.3	15	380		---	E	(2.1)	(2.05)
20		>9.5	7	(330)		---	----	2.0	(2.05)
21		(11.4)	8	(310)				2.1	----
22		>11.5	8	280				(3.5)	----
23		(10.8)	9	270				3.5	----

Time: 45.0°E.
Sweep: 1.25 Mc to 20.0 Mc in 10 minutes, automatic operation.

Table 51

Tahiti, Society Is. (17.7° S, 149.3° W) February 1959

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		12.6	26	260		---	E	2.8	2.95
01		10.4	26	250		---	E	2.7	2.75
02		8.4	23	<270		---	E	2.8	2.55
03		8.0	19	300		---	E	2.8	2.55
04		8.2	24	<290		---	E	3.0	2.70
05		7.5	24	280		---	E	2.8	2.60
06		8.5	23	200		---	1.45	3.1	2.75
07		10.6	25	245		110	2.80	3.2	3.20
08		11.6	23	240		110	3.35	4.0	2.85
09	---	13.0	23	230	---	105	3.75	4.8	2.70
10	---	14.0	26	225	---	110	(4.05)	4.8	2.60
11	---	15.7	25	230	---	110	(4.30)	5.0	2.55
12	410	0	28	225	---	110	----	5.0	2.50
13	405	D	27	225	---	105	----	4.9	2.60
14	390	0	26	225	---	110	(4.30)	4.6	(2.55)
15	380	17.0	26	230	---	110	(4.00)	4.2	2.55
16	300	16.0	27	240	---	110	3.60	3.9	2.55
17	---	16.0	25	250		110	3.05	3.8	2.50
18		15.4	24	275		---	2.20	3.1	2.50
19		15.0	24	325		---	E	3.1	2.40
20		14.8	25	345		---	E	3.1	2.40
21		14.5	23	330		---	E	3.1	2.55
22		>15.0	24	300		---	E	3.1	2.70
23		14.4	22	280		---	----	3.0	2.85

Time: 150.0°W.
Sweep: 1.2 Mc to 17.0 Mc.

Table 52

Tananarive, Madagascar (18.8° S, 47.5° E) February 1959

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		8.3	25	265		---	----	2.5	2.70
01		7.5	27	250		---	E	2.7	2.70
02		6.8	28	260		---	E	2.8	2.60
03		6.3	28	275		---	E	1.8	2.65
04		5.9	28	<275		---	E	2.1	2.65
05		5.5	28	<290		---	E	2.4	2.55
06		7.0	28	270		135	1.95	2.2	2.90
07	---	9.2	27	250	---	<115	2.90		2.90
08	---	10.9	20	245	---	110	3.40		2.85
09	---	11.4	27	240	---	110	3.80	3.8	2.65
10	---	12.4	26	<230	---	110	4.05		2.60
11	---	13.0	27	---	---	110	----		2.55
12	(370)	13.4	27	---	---	---	----		2.55
13	---	13.2	25	---	---	---	----		2.55
14	(390)	12.8	28	---	---	110	(4.15)		2.50
15	(395)	12.6	28	240	---	110	3.90		2.50
16	---	12.1	27	245	---	110	3.50	3.8	2.55
17		11.6	27	250		115	3.00	3.4	2.55
18		11.4	24	270		---	2.10	3.0	2.60
19		11.1	24	270		---	----	3.0	2.65
20		(10.8)	16	275		---	----	2.8	(2.65)
21		(10.4)	19	270		---	----	3.1	2.70
22		9.2	24	<275		---	----	3.0	2.70
23		9.1	25	270		---	E	2.9	2.75

Time: 45.0°E.
Sweep: 1.25 Mc to 20.0 Mc.

Table 53

Sao Paulo, Brazil (23.5° S, 46.5° W) February 1959

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		(14.5)	17	265					(3.3)
01		(14.5)	20	250					(3.25)
02		14.0	21	230					3.25
03		10.6	19	230					3.0
04		9.1	20	245					2.75
05		7.9	19	255					2.6
06		8.0	20	260					2.75
07		9.4	21	240			---		2.85
08		10.2	22	235			---		2.8
09		11.0	18	235					2.65
10		>11.5	9	(240)					(2.55)
11	---	(12.4)	12	<255	---				(2.6)
12	---	(13.9)	13	<265	---				(2.55)
13	(430)	(14.2)	12	<255	---				(2.6)
14	415	(14.3)	16	<250	---				(2.65)
15	400	(14.5)	13	<250	---				(2.65)
16	395	(14.4)	14	(235)	---				(2.65)
17	(410)	(14.2)	15	<245	---			3.2	(2.65)
18		(14.0)	20	260				3.0	(2.7)
19		(13.8)	19	305				2.8	(2.65)
20		>13.0	15	390					(2.55)
21		>14.0	11	315					(2.8)
22		>14.0	11	265					(2.95)
23		>14.0	17	275					(3.05)

Time: 45.0°W.
Sweep: 1.75 Mc to 20.0 Mc in 2 minutes 30 seconds.

Table 54

Canberra, Australia (35.3° S, 149.0° E) February 1959

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		>7.5	25	255				3.5	2.60
01		>7.0	26	250				3.0	2.65
02		(6.8)	26	265				1.8	2.60
03		>6.0	26	260					2.60
04		(5.6)	27	265				2.1	2.55
05		(5.7)	27	260			E		2.60
06		>6.0	27	230			2.00	2.0	2.80
07	---	7.0	26	200	---		2.80	3.1	2.90
08	450	7.5	27	200	5.0		3.35	3.7	2.80
09	440	8.5	23	200	5.5		3.70	4.4	2.70
10	400	8.8	25	200	5.6		4.00	4.3	2.75
11	410	>9.0	23	195	6.0		4.10	4.2	2.70
12	405	>9.0	24	200	5.8		4.15		2.60
13	390	9.0	23	200	5.8		4.05	4.2	2.65
14	385	>9.0	22	200	5.8		4.00		2.70
15	375	>9.0	25	200	5.8		3.00		2.60
16	390	>9.1	26	200	5.4		3.60		2.60
17	350	>9.0	25	200	5.0		3.20		2.70
18		8.7	27	215			2.60	2.7	2.80
19		>8.5	27	230			<1.60	2.1	2.80
20		>8.0	24	240					2.60
21		(8.0)	27	260				3.1	(2.55)
22		>7.7	26	270				2.2	(2.60)
23		>7.5	25	250				3.0	2.60

Time: 150.0°E.
Sweep: 1.0 Mc to 16.0 Mc in 1 minute 55 seconds.

Table 55

Trelew, Argentina (43.2° S, 65.3° W) February 1959

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		9.6	12	330				3.2	2.45
01		9.3	12	330				3.0	(2.50)
02		9.3	11	350				3.1	2.40
03		9.0	12	335		---	----	2.6	2.40
04		8.8	12	340		---	----		2.35
05		8.5	13	325		---	E		2.35
06		8.8	10	(260)		---	2.15	2.9	(2.45)
07		>9.2	11	240		99	2.95	3.6	(2.60)
08		>9.8	9	(230)		95	----	(4.1)	----
09	---	>10.0	9	(210)		95	----	(4.7)	----
10	---	>10.0	9	(225)		95	----	(5.6)	----
11	---	>10.0	12	(235)	---	95	----	5.8	----
12	(360)	>10.0	10	(225)	---	95	----	5.4	----
13	(360)	>10.8	10	(220)	---	96	----	5.1	----
14	---	>10.3	8	---	---	95	----	5.6	----
15	(370)	>10.0	12	---	---	95	----	5.9	----
16	(330)	>10.0	12	(225)	---	95	----	5.1	----
17	---	>10.0	14	---	---	97	----	6.0	----
18	---	(10.0)	13	250		97	----	5.2	----
19		>9.3	13	(255)		---	----	4.4	----
20		>9.0	9	(275)		---	----	5.8	----
21		8.9	6	---				(6.5)	----
22		>9.0	7	---				(6.0)	----
23		(9.1)	11	(340)				3.6	(2.50)

Time: 60.0°W.
Sweep: 1.3 Mc to 18.0 Mc in 30 seconds.

Table 56

Ushuaia, Argentina (54.8° S, 68.3° W) February 1959

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		9.0	25	340		---	E	3.0	2.30
01		8.9	25	350		---	E	2.2	2.30
02		8.6	26	360		---	E		2.30
03		8.3	25	345		---	E	2.4	2.30
04		7.8	26	370		---	E		2.25
05	---	8.0	25	350		---	1.50		2.25
06	---	8.0	26	290	---	145	2.10	2.7	2.35
07	---	8.8	26	280	---	120	----	3.6	2.40
08	(400)	8.9	25	265	---	111	----	4.1	2.45
09	360	>9.0	25	255	---	111	----	4.5	2.60
10	(445)	9.0	19	(260)	---	109	----	5.0	(2.45)
11	(400)	>9.0	16	(255)	---	109	----	4.2	(2.55)
12	(390)	>9.2	14	---	---	109	----		(2.60)
13	---	>9.6	12	(260)	---	109	----	5.1	----
14	(420)	>9.0	13	(260)	---	109	----		----
15	---	(9.2)	13	(260)	---	109	----		(2.70)
16		(9.3)	19	270		109	----	4.4	(2.60)
17		9.1	21	270		111	----	4.3	2.65
18		9.1	26	280		115	----	4.1	2.70
19		9.0	25	290		117	----	4.9	2.65
20		8.8	25	300		---	----	3.5	2.60
21		8.9	25	310		---	----	3.2	2.40
22		9.0	26	315		---	----	3.8	2.35
23		9.0	24	345		---	E	3.0	2.40

Time: 60.0°W.
Sweep: 1.5 Mc to 18.0 Mc in 30 seconds.

Table 57

Pole Station (90.0° S) February 1959

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00	(490)	(5.8)	25	250	---	106	2.55	3.2	(2.60)
01	(490)	(6.35)	24	260	(4.3)	105	(2.50)	3.6	(2.50)
02	450	(6.5)	24	260	(4.3)	105	2.60	3.0	(2.50)
03	470	(6.6)	27	260	4.0	103	2.60		(2.40)
04	480	(6.3)	25	270	(4.2)	103	2.60	2.6	(2.40)
05	(465)	(6.2)	23	260	4.1	105	2.62		(2.40)
06	470	(6.1)	22	270	4.0	103	2.75		(2.38)
07	500	(6.1)	20	250	(4.2)	105	2.70		(2.42)
08	(500)	(5.75)	20	260	4.0	105	2.70		(2.40)
09	570	(5.5)	15	260	3.9	101	2.80	2.9	(2.20)
10	670	(4.9)	15	265	3.8	103	2.70		(2.20)
11	(815)	4.8	13	260	3.8	103	2.75		2.25
12	---	5.25	10	270	---	109	2.70		2.75
13	<580	5.45	14	275	4.0	106	2.90		2.55
14	(500)	5.5	17	260	(4.0)	105	2.85		2.40
15	<500	6.1	22	<270	(4.3)	105	2.58		2.38
16	500	(6.0)	25	270	(4.0)	103	2.55		(2.40)
17	(480)	6.15	20	265	(4.0)	102	2.70		2.60
18	(440)	5.7	19	260	---	103	(2.50)		2.65
19	<400	(5.6)	21	260	---	105	2.52		(2.62)
20	(500)	5.75	24	270	---	103	2.65		2.65
21	(400)	(5.8)	25	250	---	103	2.60	2.9	(2.70)
22	---	6.0	27	255	---	103	(2.50)	2.5	2.70
23	---	6.0	26	255	---	103	2.60	3.0	2.80

Time: 0.0°.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 58

Dakar, French W. Africa (14.8° N, 17.4° W) January 1959

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		(12.5)	5	235		---	----		----
01		(13.3)	9	240		---	----		----
02		(12.6)	6	225		---	----	3.1	----
03		>11.3	7	220		---	----		(3.25)
04	---	9.0	10	215	---	---	----	1.8	(3.10)
05	---	7.7	19	225	---	---	E	3.0	3.25
06	---	6.2	20	<230	---	---	E	3.0	3.40
07	---	>4.4	22	230	---	---	E	3.1	3.25
08	---	9.2	22	250	---	---	2.25	3.8	3.25
09	---	13.9	22	240	---	105	3.00	3.8	3.30
10	---	14.7	18	230	---	105	3.50	4.0	3.30
11	---	14.6	16	<220	---	<105	3.80	4.5	2.90
12	---	(14.4)	9	205	---	100	4.00	4.6	(2.60)
13	---	(14.1)	7	200	---	100	4.00	4.5	----
14	---	13.2	10	<210	---	105	4.05	4.5	(2.05)
15	---	13.7	13	220	---	105	4.00	4.0	2.10
16	---	12.9	11	220	---	105	3.80		2.15
17	---	(13.5)	9	235	---	105	3.40	4.0	(2.15)
18		(13.0)	9	250		110	2.65	3.2	(2.30)
19		(12.7)	7	295		---	----	3.0	(2.20)
20		>13.2	3	380		---	E	3.1	----
21		>14.0	5	<375		---	----	3.0	----
22		>13.5	3	300		---	----		
23		(12.3)	5	250		---	----	2.2	

Time: 0.0°.
Sweep: 1.2 Mc to 17.0 Mc.

Table 59

Tahiti, Society Is. (17.7° S, 149.3° W) January 1959

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		10.0	23	295		---	----	3.1	2.50
01		9.2	24	295		---	----	3.1	2.50
02		9.0	25	300		---	E	2.8	2.50
03		8.4	23	295		---	E	2.7	2.55
04		7.6	20	(270)		---	E	2.8	2.50
05		7.4	24	300		---	E	3.0	2.55
06		8.4	24	270		---	2.10	3.2	2.70
07		10.0	23	250		110	3.00	5.5	2.85
08	---	11.0	20	240	---	110	3.70	5.7	2.40
09	---	12.2	16	240	---	110	4.05	5.6	2.20
10	---	13.8	19	230	---	110	(4.30)	5.3	2.25
11	---	14.5	23	225	---	105	(4.35)		2.20
12	455	15.8	23	225	(6.8)	105	(4.40)	5.2	2.25
13	425	16.5	22	230	(6.5)	110	(4.30)	5.1	2.30
14	400	15.7	22	230	(6.5)	105	(4.30)		2.35
15	420	14.5	21	240	6.5	105	4.10	4.6	2.30
16	435	14.0	19	240	(6.4)	105	3.65	5.0	2.25
17	425	13.7	22	250	---	110	3.10	4.0	2.30
18		13.5	20	285		120	2.30	4.2	2.30
19		12.2	15	350		---	E	4.0	2.25
20		11.2	19	380		---	E	3.1	2.25
21		11.0	21	365		---	E	3.1	2.30
22		11.5	21	<350		---	----	3.1	2.40
23		11.2	20	300		---	----	3.1	2.50

Time: 150.0°W.
Sweep: 1.2 Mc to 17.0 Mc.

Table 60

Pole Station (90.0° S) January 1959

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00	(470)	(6.15)	24	240	4.6	101	3.00	3.8	2.48
01	540	(6.0)	27	250	4.6	101	3.00	4.1	(2.30)
02	(520)	(6.0)	27	250	4.5	101	3.00	5.2	(2.30)
03	515	(6.1)	25	250	4.5	101	3.00		(2.30)
04	495	(6.3)	25	250	4.5	101	3.00		(2.35)
05	520	(6.3)	28	250	4.4	101	3.00		2.25
06	550	(6.1)	23	240	4.3	101	3.00		(2.25)
07	560	(6.0)	19	245	4.3	101	3.00		(2.20)
08	530	(5.8)	26	250	4.3	101	3.00		(2.30)
09	605	5.55	24	250	4.3	101	3.00		(2.28)
10	600	5.25	22	250	4.4	101	3.00		2.15
11	780	5.4	21	<260	4.3	101	3.08		2.05
12	725	5.4	21	260	4.5	101	3.20		2.25
13	650	5.2	28	<270	4.5	101	3.05		2.30
14	(540)	5.7	24	260	4.6	101	3.00		2.38
15	530	6.0	28	260	4.4	101	3.00		2.40
16	505	6.5	25	<260	4.5	101	3.00		2.40
17	510	6.0	26	260	4.5	101	3.00		2.42
18	(515)	5.7	25	260	4.4	101	3.00		2.35
19	505	5.8	23	255	4.5	101	3.00		2.40
20	(600)	5.55	26	250	(4.5)	101	3.00		2.35
21	550	5.8	20	250	4.6	101	3.00		2.40
22	530	(5.7)	25	250	(4.6)	101	3.00		(2.50)
23	(550)	5.95	24	250	4.7	101	3.00	3.8	2.40

Time: 0.0°.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 61

Yellowknife, Canada (62.4° N, 114.4° W) — December 1958

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	fEs	(M3000)F2
00		5.0	20	310		---	---	5.0	
01		4.6	20	330		---	---	5.7	
02		4.9	18	300		---	---	4.4	
03		4.5	25	320		---	---	4.1	
04		5.0	20	340		---	---	4.0	
05		4.6	24	320		---	---	4.0	
06		4.4	22	350		---	(2.0)	3.8	
07		4.8	22	300		115	(2.8)	4.0	
08		4.9	21	300		---	---	4.0	
09		5.9	19	300		---	---	4.0	
10		7.1	26	290		---	(2.0)	2.0	
11		9.7	29	250		---	(2.0)		
12		11.2	29	250		---	(2.1)		
13	---	12.1	29	240	---	---	(2.1)		
14		13.2	26	240		---	2.1		
15		13.2	28	240		---	2.0		
16		12.5	30	230		---	E		
17		10.7	27	250		---	---		
18		8.6	29	270		---	---	2.3	
19		6.9	22	280		---	---	2.8	
20		5.5	25	290		---	---	3.0	
21		5.2	22	300		---	(2.5)	3.8	
22		5.0	24	310		---	---	3.9	
23		5.0	21	300		---	---	4.0	

Time: 105.0°W.
Sweep: 1.6 Mc to 20.0 Mc in 15 seconds.

Table 62

Meanook, Canada (54.6° N, 113.3° W) — December 1958

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	fEs	(M3000)F2
00		4.4	26	280				3.1	
01		4.3	25	290		---	---	3.3	
02		4.2	24	300				4.1	
03		4.2	25	310				3.9	
04		4.2	25	310				4.0	
05		4.4	28	300				4.0	
06		4.2	24	290				3.0	
07		4.0	26	280					
08		4.7	24	270		---	E		
09		7.4	26	240		110	2.0		
10		10.0	26	230		110	2.3		
11		12.3	26	220	---	110	2.7		
12	---	13.2	27	220	---	110	2.8		
13	---	13.8	27	220	---	110	2.8		
14		14.2	28	220		110	2.6		
15		14.1	29	220		(110)	2.3		
16		13.2	28	220		---	1.9		
17		12.2	28	210		---	---		
18		10.2	29	220					
19		8.5	29	220					
20		6.9	28	230					
21		5.5	27	230					
22		5.0	25	250					
23		4.5	26	270		---	---		

Time: 105.0°W.
Sweep: 1.6 Mc to 20.0 Mc in 15 seconds.

Table 63

Eureka, Canada (80.0° N, 85.9° W) — February 1958

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	fEs	(M3000)F2
00		6.0	25	280					
01		5.6	25	280					
02		4.7	26	280					
03		5.4	25	270					
04		5.3	24	270					
05		5.0	24	270					
06		4.7	24	270					
07		4.8	22	270					
08		5.2	23	260					
09		5.2	23	260		---	---		
10		6.1	25	250		---	---		
11		6.7	25	260		---	---		
12		7.0	24	260		---	---		
13		7.0	25	250		---	---		
14		8.2	26	260		---	---		
15		8.4	26	250		---	---		
16		8.3	26	250		---	---		
17		7.5	27	250		---	---		
18		6.8	27	260					
19		7.4	24	260					
20		5.4	24	270					
21		6.0	23	260					
22		5.2	24	270					
23		5.7	25	270					

Time: 75.0°W.
Sweep: 1.6 Mc to 20.0 Mc in 15 seconds.

Table 64

Lulea, Sweden (65.6° N, 22.1° E) — February 1950

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		(6.0)	11	400				3.6	----
01		(5.3)	11	370				3.2	----
02		(5.1)	14	355				2.7	----
03		(5.2)	11	360				1.7	----
04		(5.8)	13	330		---	---		----
05		(5.0)	14	310		---	---		----
06		(5.6)	17	300		---	---		----
07		(5.5)	19	280		---	---		(2.75)
08		6.4	22	260		(200)	1.8		2.8
09		8.1	23	255		155	2.2		3.0
10		9.4	22	250		140	2.4		3.0
11		10.6	22	250		---	2.6		2.9
12		11.4	19	250		140	2.6		2.9
13		12.0	20	245		140	2.5		2.9
14		12.0	18	245		140	2.3		2.95
15		11.0	16	240		140	2.1		3.0
16		9.8	16	235		---	1.7		3.0
17		(7.0)	15	245		---	---		(3.0)
18		(4.5)	16	280				2.0	(2.85)
19		(4.6)	14	270				2.2	----
20		(4.8)	12	315				3.7	
21		(5.0)	13	340				3.6	
22		(4.6)	12	(370)				3.6	----
23		(4.9)	10	380				3.3	----

Time: 15.0°E.
Sweep: 0.65 Mc to 25.0 Mc in 5 minutes, automatic operation.

Table 65

Meanook, Canada (54.6° N, 113.3° W) — February 1958

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	fEs	(M3000)F2
00		5.1	17	300				2.8	
01		5.0	20	300		---	---	4.5	
02		4.6	20	320		---	---	4.8	
03		4.5	23	320		---	---	5.0	
04		4.9	21	350		---	---	4.3	
05		5.1	20	350		---	---	4.4	
06		5.1	23	360		---	---	3.0	
07		5.2	23	310		---	---		
08		6.2	27	280		---	---		
09		7.3	27	250		---	2.4		
10		8.0	27	230		110	2.8		
11		9.2	26	230		110	3.0		
12	---	10.8	25	230	---	105	3.1		
13	---	11.7	26	230	---	110	3.0		
14	---	12.3	26	230	---	110	3.0		
15	---	12.6	26	220	---	105	2.9		
16		12.5	27	230		105	2.7		
17		12.5	27	220		---	2.2		
18		12.0	27	220		---	---		
19		9.5	27	230		---	---		
20		7.7	25	240		---	---		
21		6.1	27	270		---	---		
22		5.2	25	270		---	---	3.5	
23		5.2	21	280				3.9	

Time: 105.0°W.
Sweep: 1.6 Mc to 20.0 Mc in 15 seconds.

Table 66

Freiburg, Germany (48.1° N, 7.6° E) — February 1958

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		5.0	28	295					2.40
01		4.8	26	300					2.40
02		4.8	26	<310					2.45
03		4.6	26	310					2.45
04		4.2	26	285					2.55
05		3.9	26	270					2.55
06		4.5	26	260				1.2	2.50
07		7.7	27	240		120	1.75	2.0	2.95
08		10.8	27	230		113	2.55		3.00
09		12.6	27	225		110	3.00		2.95
10		(13.4)	27	225		109	3.25		(2.90)
11		13.6	27	225		108	3.40		2.85
12		13.5	27	230		<109	3.45		2.80
13		13.4	27	230		108	3.38		2.80
14		(13.2)	27	230		111	3.15		(2.80)
15		13.0	27	230		113	2.85	2.9	(2.85)
16		12.4	27	225		118	2.30	2.6	2.90
17		11.4	27	225		---	1.30	1.8	2.95
18		9.2	28	215				1.5	2.95
19		7.8	28	225					2.85
20		6.6	28	<245					2.75
21		5.7	28	260					2.55
22		5.3	28	280					2.45
23		5.2	27	290					2.40

Time: 0.0°.
Sweep: 1.25 Mc to 20.0 Mc in 3 minutes.

Table 67

Rabat, Morocco (30.9° N, 6.8° W) February 1958

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		>7.5	23	<260				2.0	2.70
01		(8.1)	21	<260				2.2	2.80
02		7.5	21	<255				2.0	2.80
03		6.8	24	<275				2.2	2.80
04		6.6	22	<275				1.8	2.65
05		6.4	22	<270					2.70
06		4.8	23	<250					2.75
07		5.7	22	260		---	----	2.1	2.95
08		9.4	22	235		115	2.50	3.1	3.20
09	---	12.0	21	230		110	3.05		3.20
10	---	13.3	23	230		105	3.50		3.00
11	---	14.2	24	230		105	3.70		2.95
12	(250)	14.0	26	230		105	3.90		2.85
13	---	13.6	26	230	---	110	3.90		2.80
14	(250)	13.5	23	230		105	3.80		2.75
15	(320)	13.4	26	235		110	3.60		2.75
16		13.2	24	240		110	3.20		2.80
17		12.8	25	245		115	2.60	3.4	2.90
18		(12.0)	26	245		---	----	3.2	(2.95)
19		(10.0)	25	<245				2.5	(2.90)
20		9.0	26	<240				2.4	(2.75)
21		(8.6)	24	<250				2.3	(2.70)
22		8.2	25	<270				2.2	2.80
23		8.0	25	<260				2.0	2.80

Time: 0.0°.
Sweep: 1.6 Mc to 17.0 Mc in 1 minute.

Table 68

Tamanrasset, French W. Africa (22.8° N, 5.5° E) February 1958

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		>15.2	16	240				2.4	----
01		(14.5)	15	225				2.4	----
02		>11.5	15	225				2.2	----
03		8.5	15	210				2.0	(3.20)
04		>5.7	15	230				2.2	2.85
05		>5.5	15	260				2.5	2.90
06		(6.2)	13	280		---	E	2.4	(3.00)
07		>11.0	11	250		110	2.60	(3.2)	----
08		13.5	16	235		105	3.25	3.4	3.10
09		>15.1	14	230		105	>3.60	3.8	(2.95)
10		>16.0	13	220		105	3.85	4.2	----
11	---	>16.0	15	220		105	(4.00)		----
12	(390)	0	15	210		105	4.10		
13	385	0	15	220		105	3.95		
14	(375)	0	13	235		105	3.80		
15	(350)	D	13	235		105	3.55	3.7	----
16	---	0	17	245		110	3.00	3.3	----
17		0	18	260		115	2.15	3.2	----
18		>16.0	20	265		---	E	2.7	----
19		>16.2	19	300				2.2	
20		D	16	270				2.3	----
21		>16.3	15	250				2.2	----
22		0	18	250				2.0	----
23		>16.0	19	260				2.1	----

Time: 0.0°.
Sweep: 1.2 Mc to 17.0 Mc in 1 minute.

Table 69

Dakar, French W. Africa (14.7° N, 17.4° W) February 1958

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		(15.5)	3	240					----
01		(16.3)	8	215					----
02		(14.7)	6	210					----
03		(9.2)	12	200				1.8	(3.20)
04		7.0	13	190				2.5	2.95
05		6.0	16	220		---	----	2.0	2.90
06		5.6	17	235		---	----	3.4	2.95
07		5.6	16	235		---	----	3.4	3.15
08		(10.4)	12	240		115	2.15	3.5	3.20
09		(13.6)	7	220		105	3.00	3.9	(3.25)
10		(15.9)	14	210		100	(3.55)	4.4	(2.95)
11		(16.5)	17	200		100	3.90	4.0	(2.85)
12		>16.6	12	190		95	4.05		(2.70)
13		(16.0)	8	190		95	4.10		(2.55)
14	---	(15.8)	9	190	---	95	4.15		(2.55)
15	(385)	(15.6)	10	200	---	100	4.00		(2.50)
16	---	(15.7)	8	<210	---	100	(3.70)	3.8	(2.65)
17		(15.6)	6	215		100	3.35	4.2	(2.60)
18		(15.6)	4	230		105	2.80	3.5	----
19		(15.3)	1	260		130	1.80	3.4	----
20		----	0	<340		---	E	3.2	
21		(6.9)	1	335		---	----	3.2	----
22		(10.7)	2	310				3.0	----
23		(10.6)	2	270				3.2	----

Time: 0.0°.
Sweep: 1.25 Mc to 20.0 Mc in 10 minutes, automatic operation.

Table 70

Paramaribo, Surinam (5.8° N, 55.2° W) February 1958

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	fEs	(M3000)F2
00		15.9	25	260				3.2	2.60
01		15.4	24	250				3.8	2.70
02		15.7	25	240				3.6	2.80
03		15.4	26	240				3.1	2.90
04		13.0	25	225				3.1	3.00
05		11.4	26	215				2.8	3.05
06		8.7	26	215				3.4	3.05
07		6.3	25	225				3.1	2.90
08		6.4	25	250				3.8	2.70
09		6.0	26	250				4.0	2.90
10		8.0	26	250		---	1.7	4.2	3.05
11	---	11.5	26	245		100	2.8	4.8	3.15
12	(250)	14.0	27	220		100	3.4	4.8	3.05
13	255	14.3	27	220	---	100	3.8	4.7	2.95
14	270	14.3	27	210	---	100	4.2	4.6	2.85
15	350	14.8	27	210	8.4	100	4.4		2.70
16	350	15.0	27	210	8.0	100	4.4		2.65
17	375	14.8	27	215	8.0	100	4.3		2.55
18	380	15.0	26	225	7.8	100	4.1	4.6	2.50
19	380	14.8	26	230	7.8	100	3.9	4.8	2.55
20	360	14.6	26	240	7.8	100	3.4	4.7	2.50
21	350	14.8	26	250		100	2.8	4.5	2.55
22		14.8	25	280		---	1.7	4.2	2.60
23		15.1	26	290				4.1	2.60

Time: 0.0°.
Sweep: 1.4 Mc to 20.0 Mc in 40 seconds.

Table 71

Tahiti, Society Is. (17.7° S, 149.3° W) February 1958

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		11.6	21	250		---	(0.90)	3.1	2.95
01		10.2	21	245		---	(0.90)	3.1	2.65
02		8.9	20	265		---	----	3.1	2.50
03		8.3	21	300		---	(1.10)	3.1	2.45
04		8.2	20	330		---	E	2.0	2.50
05		8.7	20	300		---	----	3.0	2.50
06		9.3	23	280		<120	1.75	3.1	2.70
07		11.5	19	250		105	2.80	3.3	3.05
08	---	12.9	19	240		100	(3.50)	3.8	2.90
09	---	13.6	18	230		100	3.70	4.1	2.65
10	---	14.7	22	225		100	(4.10)	4.2	2.50
11	---	16.0	22	215		100	(4.30)		2.30
12	395	0	22	<220	---	100	----		2.50
13	395	16.3	20	220	(7.3)	100	(4.40)		2.50
14	400	15.9	22	<225	7.2	100	(4.25)		2.45
15	395	15.2	21	230	7.0	100	3.95	4.1	2.50
16	405	15.0	23	240	6.7	100	3.60	4.2	2.50
17	(405)	14.8	21	250		105	3.05	4.0	2.50
10	---	14.3	22	275		120	2.05	3.9	2.45
19		14.4	22	335		---	----	4.0	2.40
20		14.4	23	340		---	----	3.1	2.40
21		15.3	23	325		---	----	3.1	2.50
22		15.2	22	280		---	----	3.1	2.60
23		14.5	21	265		---	----	3.1	2.80

Time: 150.0°W.
Sweep: 1.2 Mc to 17.0 Mc in 1 minute.

Table 72

Ushuaia, Argentina (54.8° S, 68.3° W) February 1958

Time	h'F2	foF2—Count		h'F	foF1	h'E	foE	foEs	(M3000)F2
00		>8.2	22	325				2.2	(2.45)
01		>8.0	20	310				2.4	2.50
02		8.1	21	310				2.6	2.50
03		7.4	20	310					2.45
04		7.0	20	345		---	E		2.35
05	---	7.1	21	345		---	E		2.30
06	---	>8.0	22	280	---	138	2.0	2.8	2.35
07	---	8.4	23	250	---	103	2.8	3.5	(2.65)
08	(300)	>8.6	23	235	---	101	---	3.8	(2.60)
09	(390)	>8.1	21	(230)	5.7	101	---	4.6	(2.50)
10	(380)	>8.3	21	---	---	101	---	4.4	----
11	320	>8.5	16	---	---	---	---	4.0	----
12	375	>8.2	12	---	---	---	---	5.1	----
13	370	>8.6	13	---	6.0	---	---		----
14	(365)	>8.9	12	---	---	---	---		----
15	---	>9.0	11	---	---	---	---		----
16	---	>8.3	14	(230)	---	101	---		----
17	---	8.5	25	250	---	101	---		2.80
18		8.3	25	250	---	101	---	3.0	2.85
19		8.4	25	255		103	2.2	3.8	2.80
20		8.4	22	280		---	---	3.6	2.80
21		>8.2	19	300		---	---	3.6	(2.55)
22		(8.2)	19	300		---	---	3.1	(2.55)
23		(8.2)	22	320		---	---	2.9	(2.50)

Time: 60.0°W.
Sweep: 1.3 Mc to 18.0 Mc in 30 seconds.

USCOMM-NBS-BL

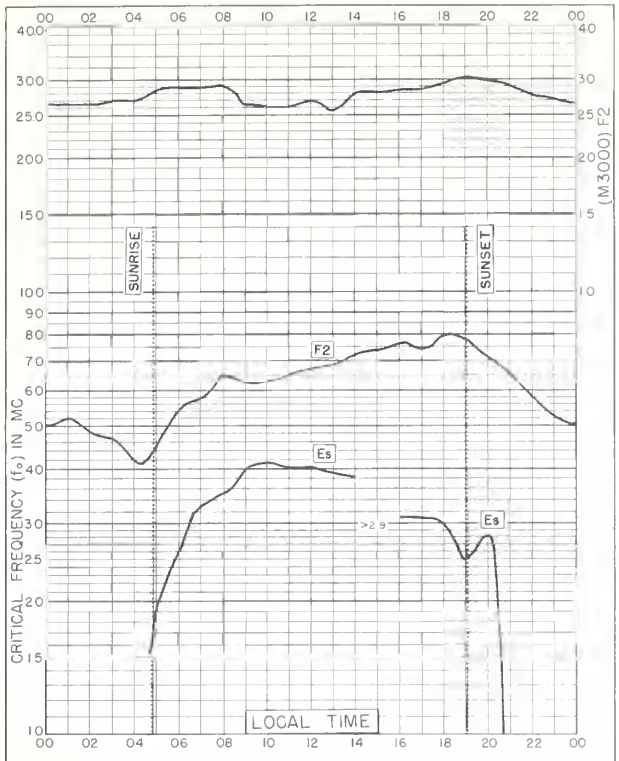


Fig. 1. BOULDER, COLORADO
40.0°N, 105.3°W MAY 1960

NBS 503

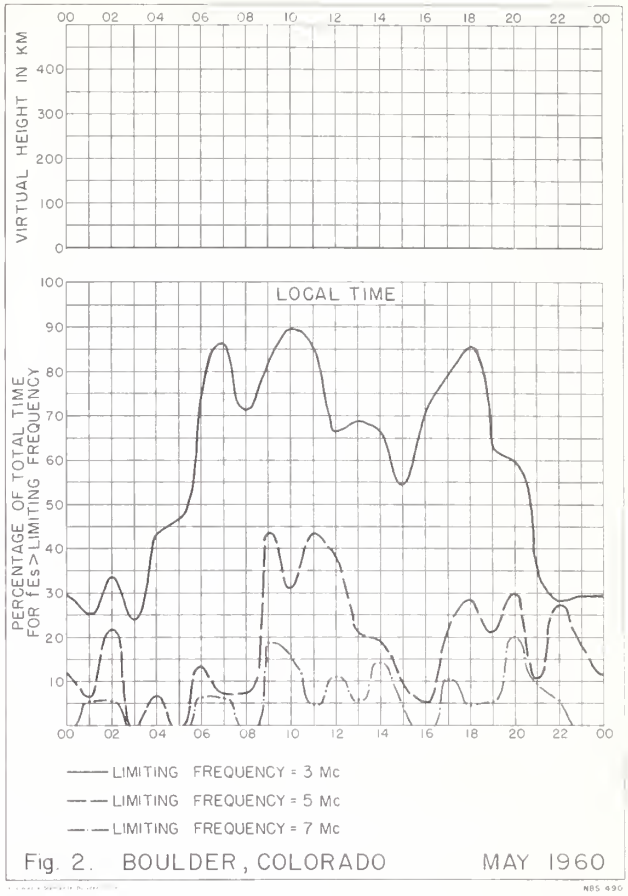


Fig. 2. BOULDER, COLORADO MAY 1960

NBS 490

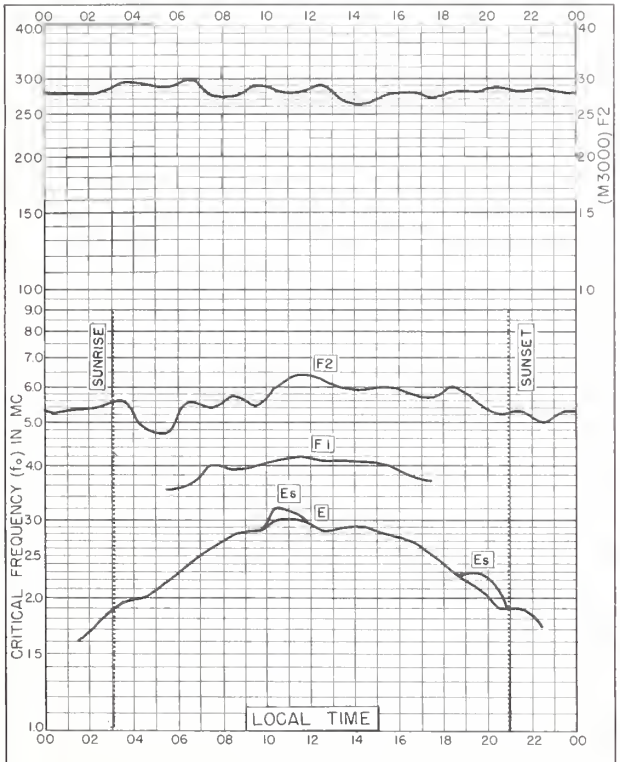


Fig. 3. THULE, GREENLAND
76.6°N, 68.7°W APRIL 1960

NBS 503

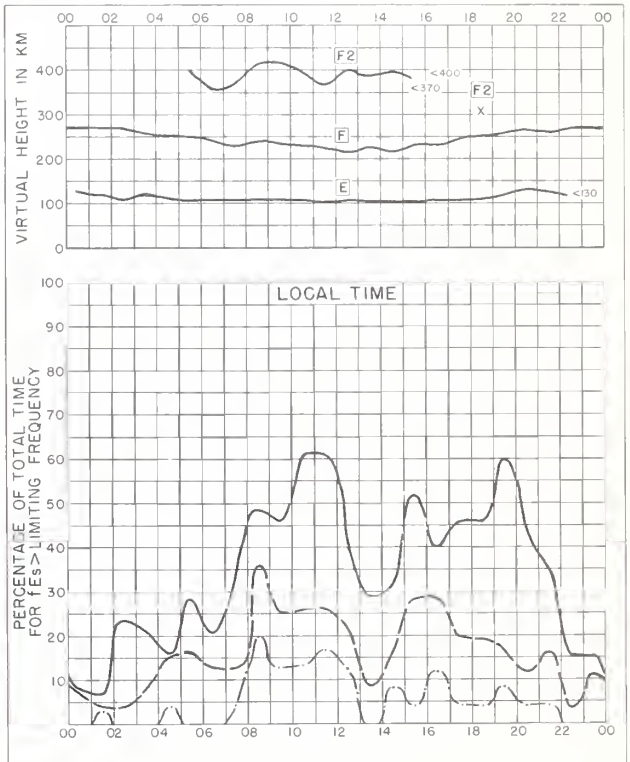


Fig. 4. THULE, GREENLAND APRIL 1960

NBS 490

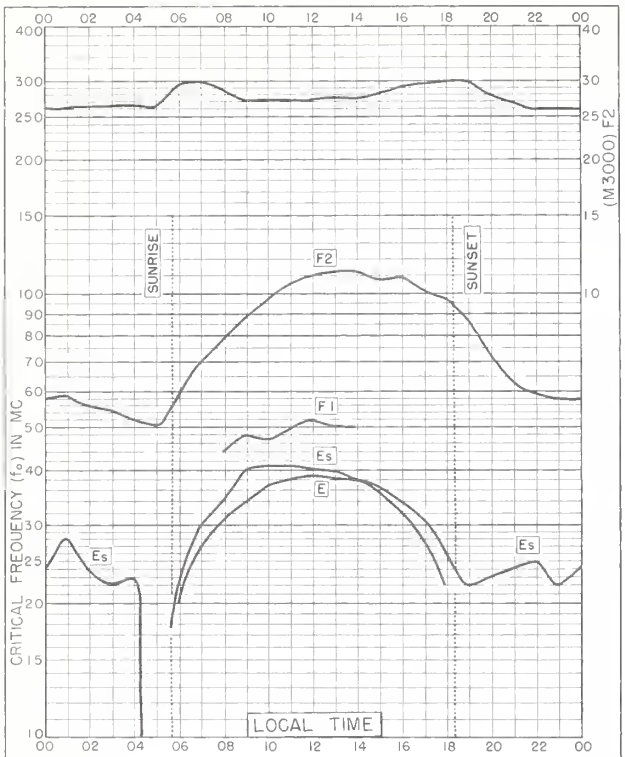


Fig. 5. WHITE SANDS, NEW MEXICO
32.3°N, 106.5°W APRIL 1960

NBS 503

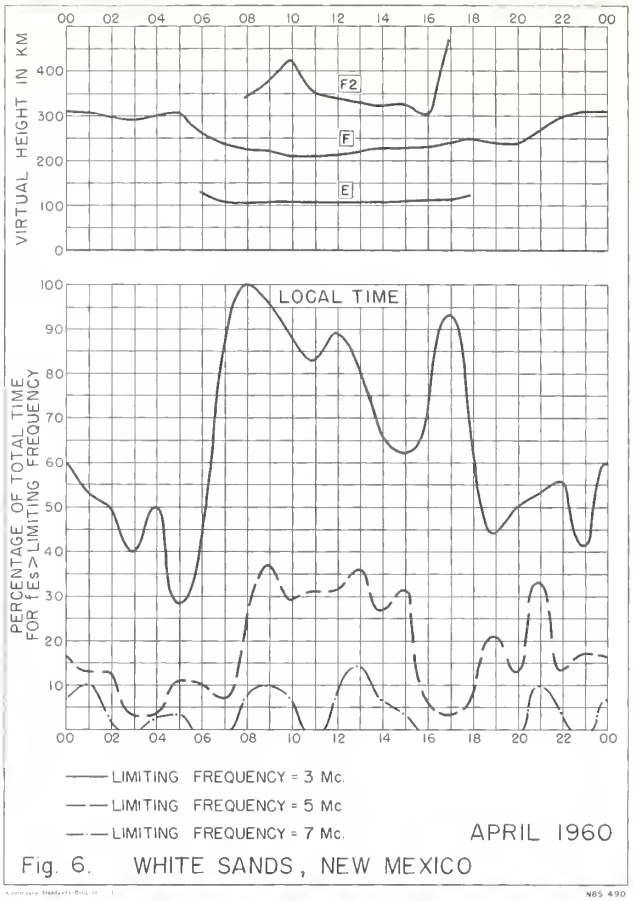


Fig. 6. WHITE SANDS, NEW MEXICO APRIL 1960

NBS 490

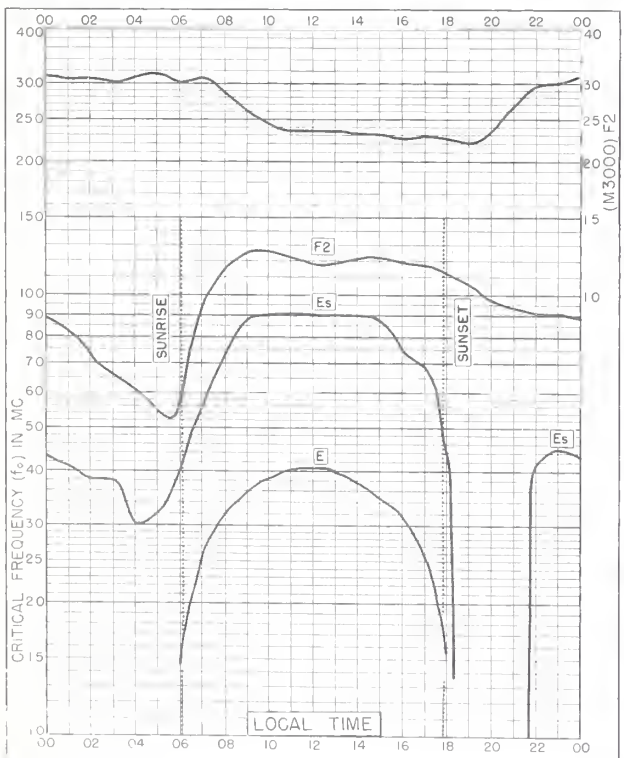


Fig. 7. HUANCAYO, PERU
12.0°S, 75.3°W APRIL 1960

NBS 503

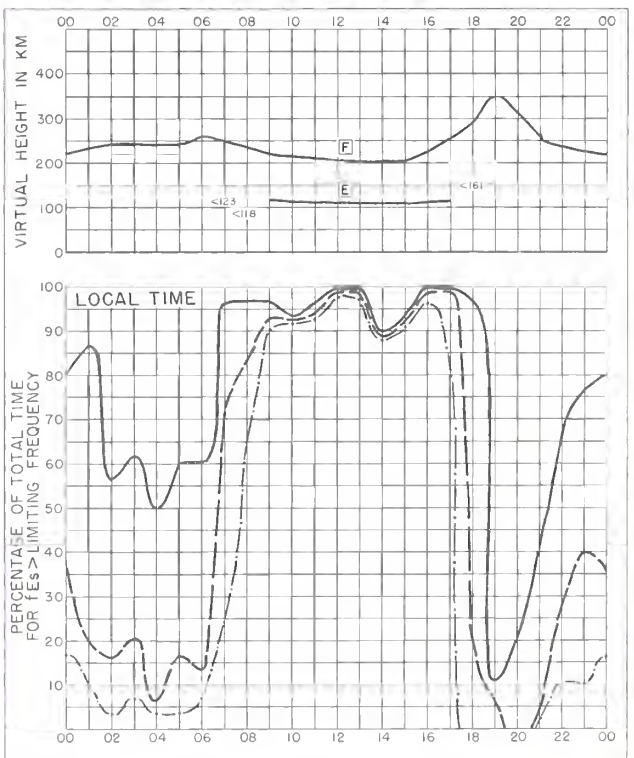


Fig. 8. HUANCAYO, PERU APRIL 1960

NBS 490

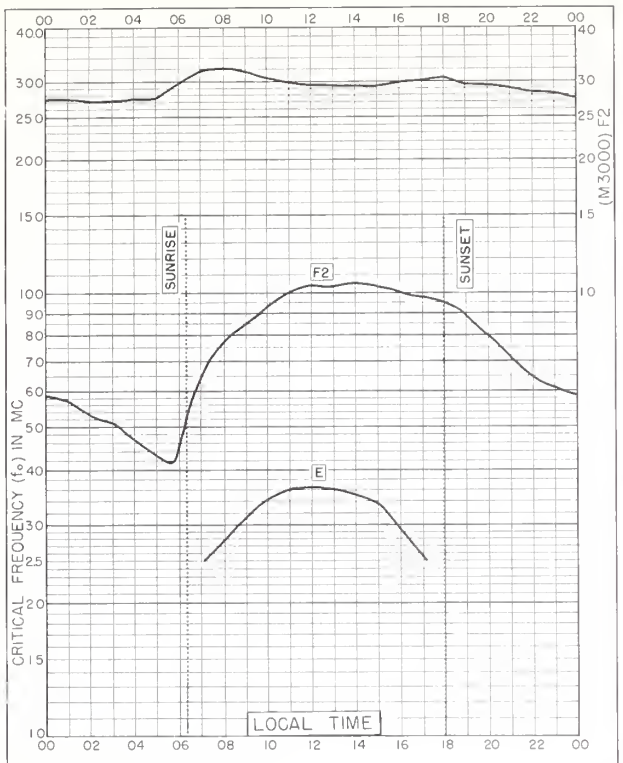
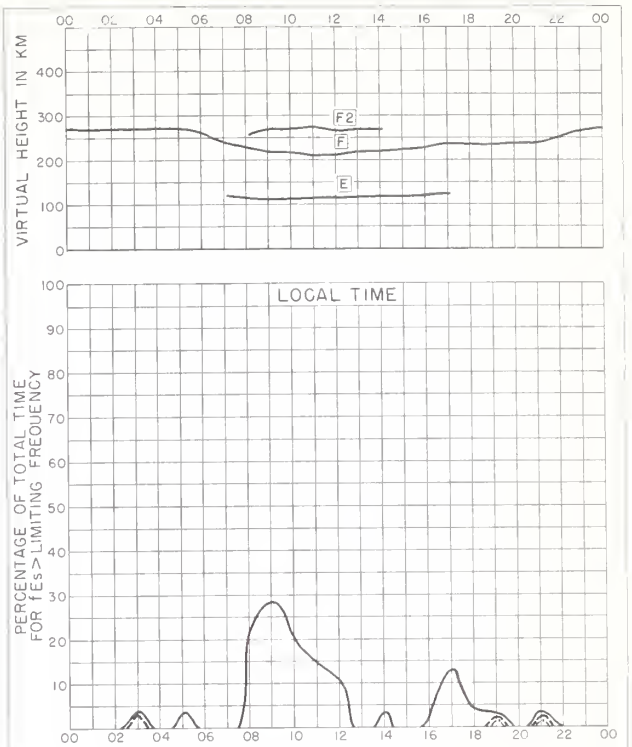


Fig. 9. FT. MONMOUTH, NEW JERSEY
40.4°N, 74.1°W MARCH 1960



MARCH 1960

Fig. 10. FT. MONMOUTH, NEW JERSEY

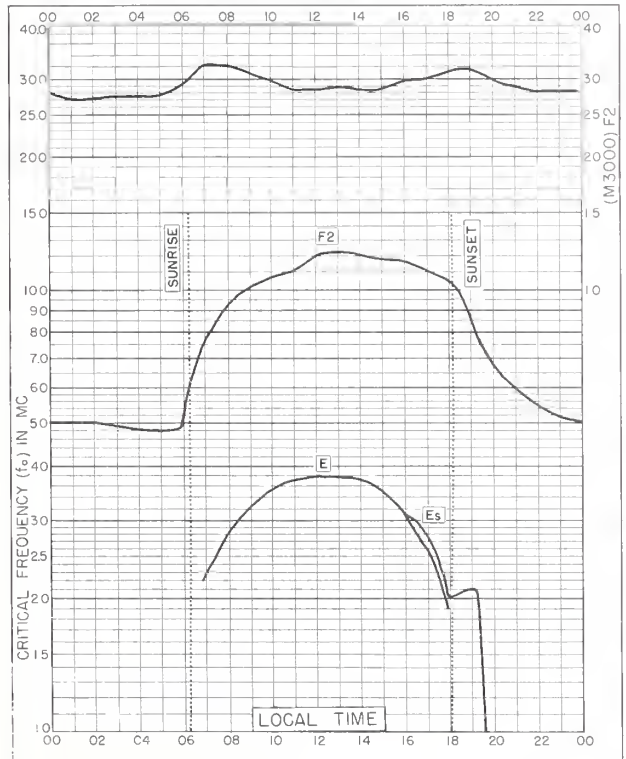
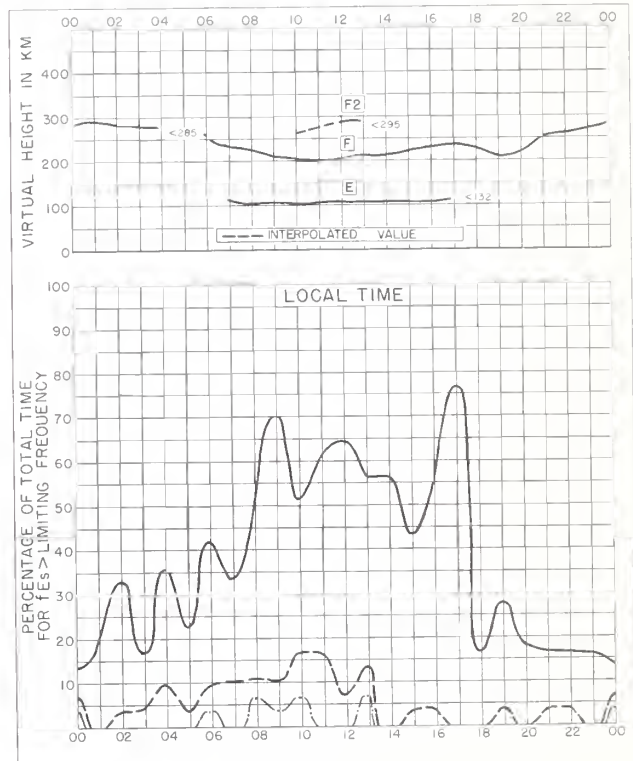


Fig. 11. WHITE SANDS, NEW MEXICO
32.3°N, 106.5°W MARCH 1960



MARCH 1960

Fig. 12. WHITE SANDS, NEW MEXICO

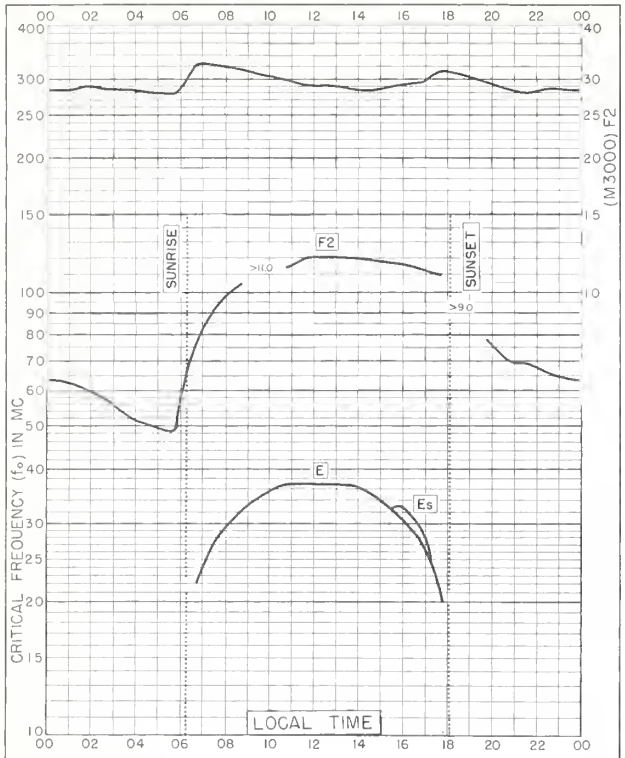


Fig. 13. GRAND BAHAMA I.
26.6°N, 78.2°W MARCH 1960

NBS 503

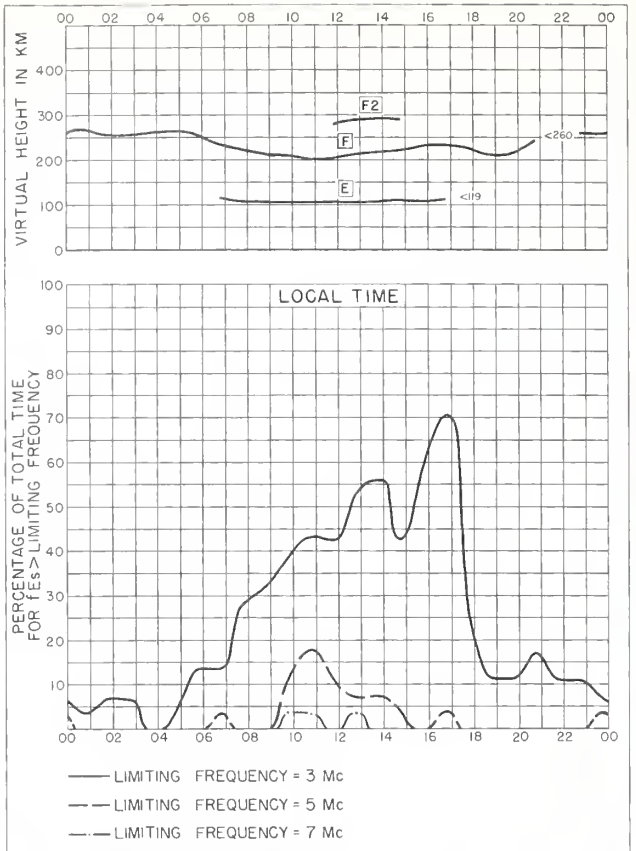


Fig. 14. GRAND BAHAMA I. MARCH 1960

NBS 490

Fig. 15. TALARA, PERU
4.6°S, 81.3°W MARCH 1960

NBS 503

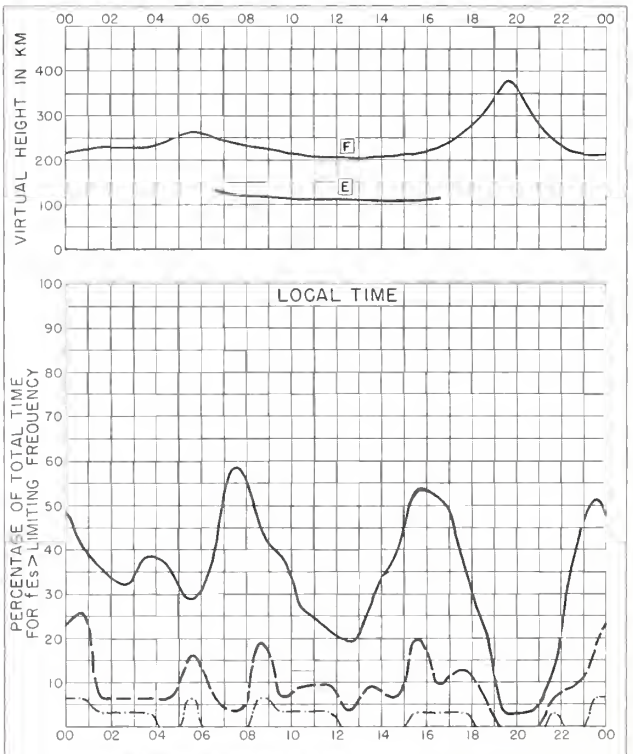


Fig. 16. TALARA, PERU MARCH 1960

NBS 490

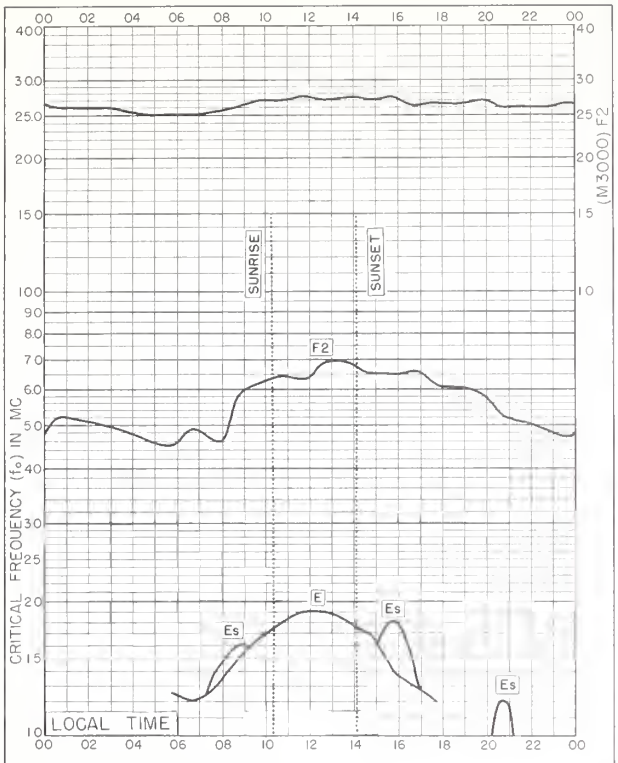
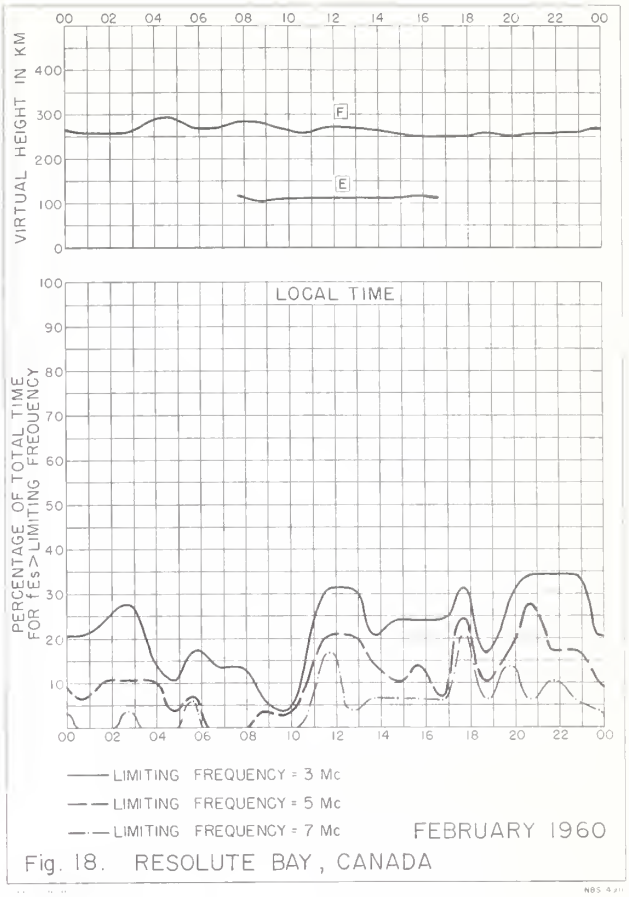


Fig. 17. RESOLUTE BAY, CANADA
74.7°N, 94.9° W FEBRUARY 1960



FEBRUARY 1960

Fig. 18. RESOLUTE BAY, CANADA

Fig. 19. TROMSO, NORWAY
69.7°N, 19.0°E FEBRUARY 1960

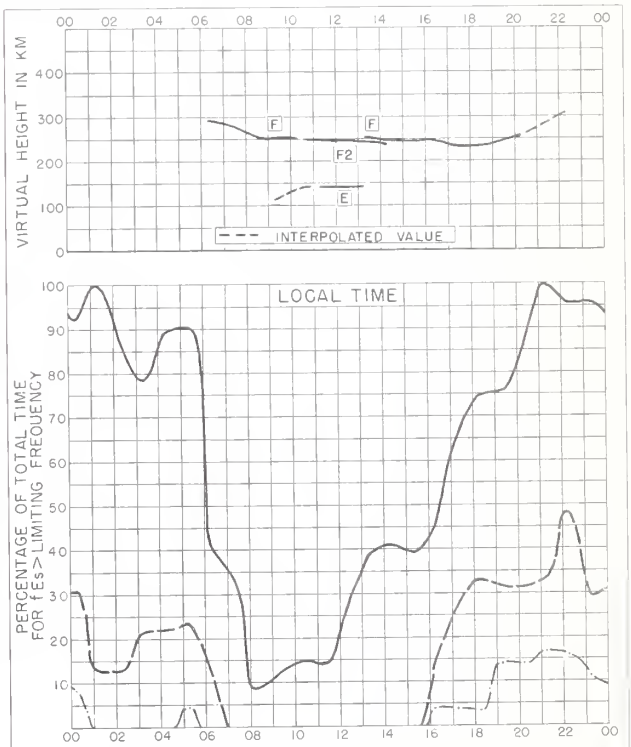


Fig. 20. TROMSO, NORWAY FEBRUARY 1960

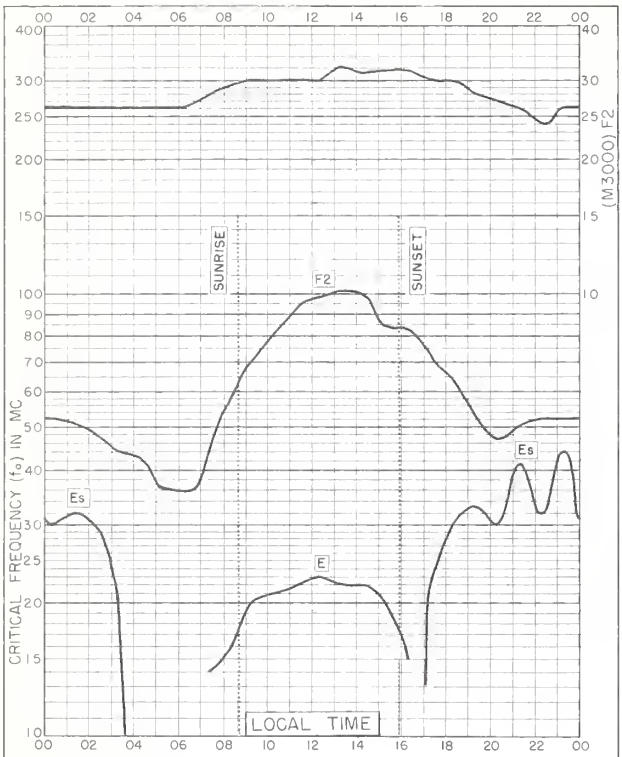


Fig. 21. KIRUNA, SWEDEN
67.8°N, 20.3°E FEBRUARY 1960

NBS 503

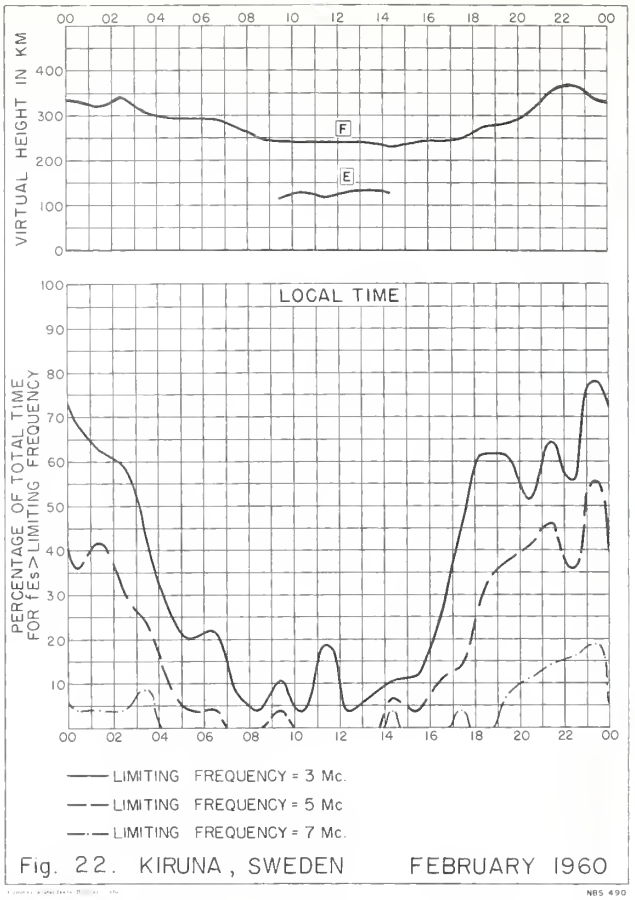


Fig. 22. KIRUNA, SWEDEN FEBRUARY 1960

NBS 490

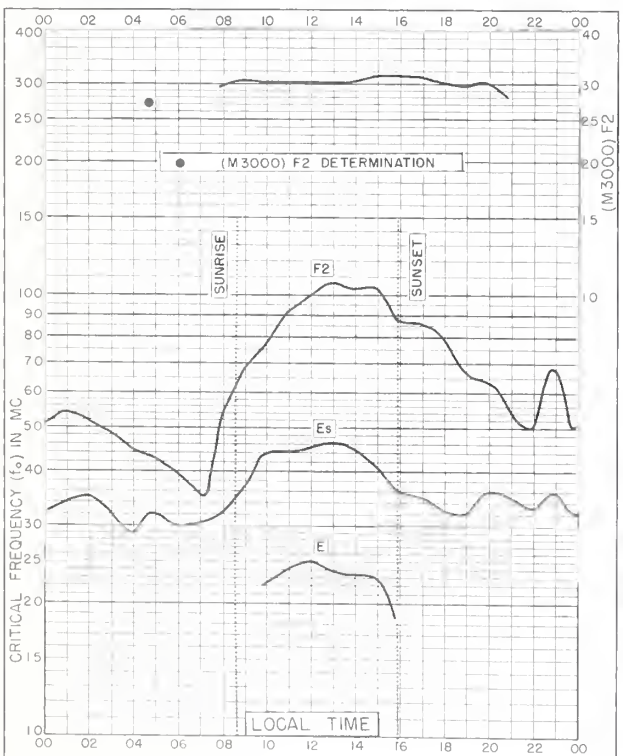


Fig. 23. SODANKYLA, FINLAND
67.4°N, 26.6°E FEBRUARY 1960

NBS 503

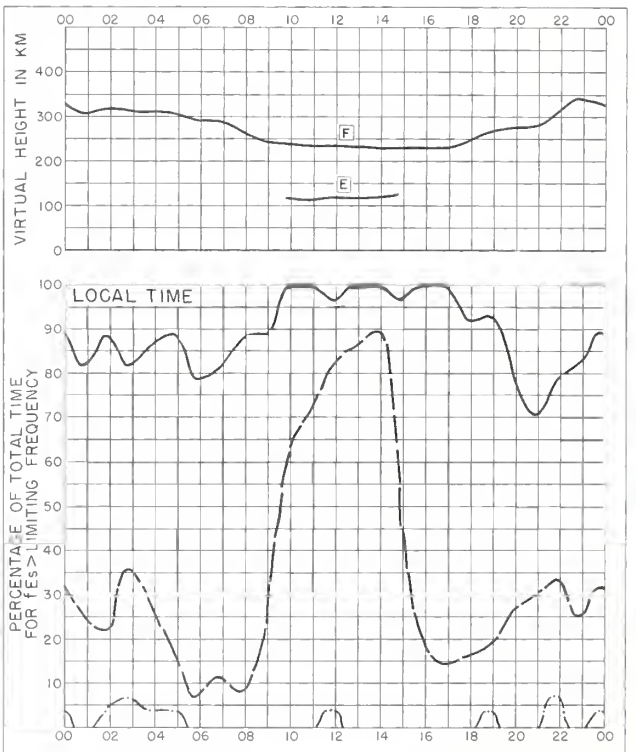


Fig. 24. SODANKYLA, FINLAND FEBRUARY 1960

NBS 490

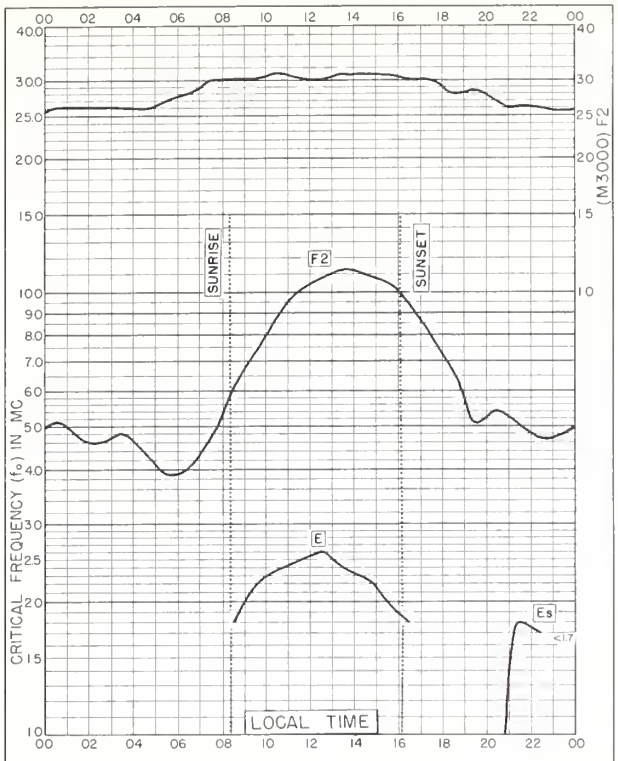


Fig. 25. LULEA, SWEDEN
65.6°N, 22.1°E FEBRUARY 1960

NBS 503

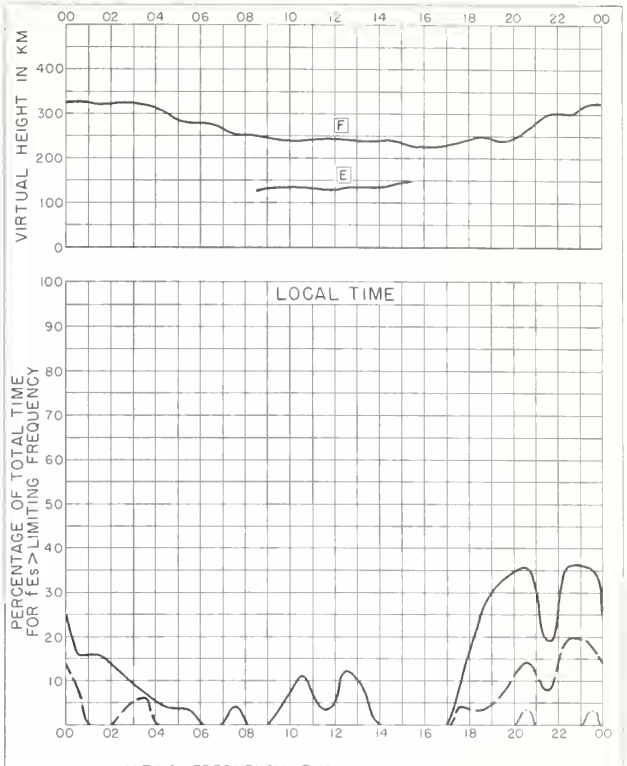


Fig. 26. LULEA, SWEDEN FEBRUARY 1960

NBS 490

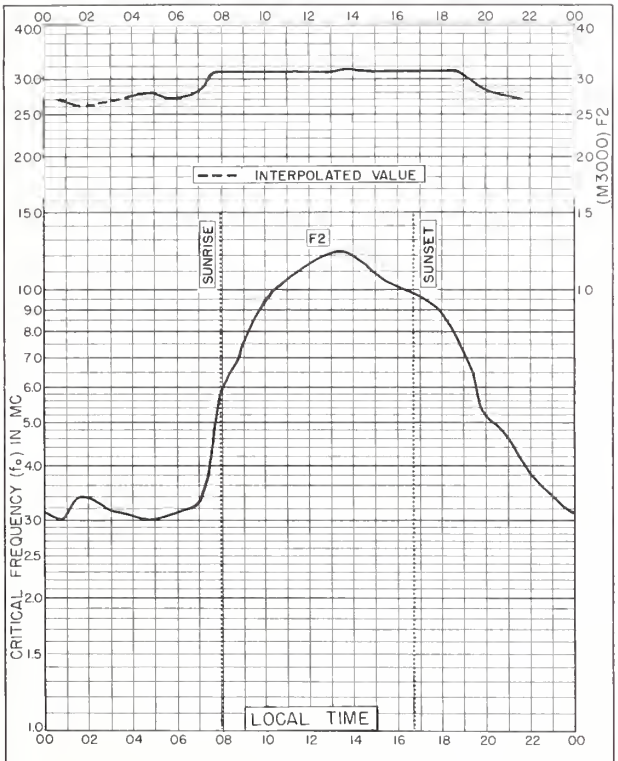


Fig. 27. NURMIJARVI, FINLAND
60.5°N, 24.6°E FEBRUARY 1960

NBS 503

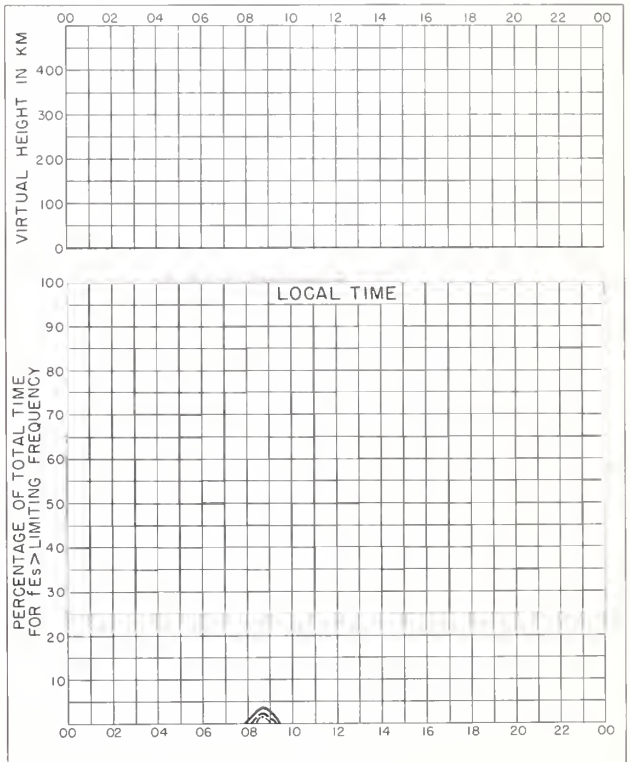


Fig. 28. NURMIJARVI, FINLAND FEBRUARY 1960

NBS 490

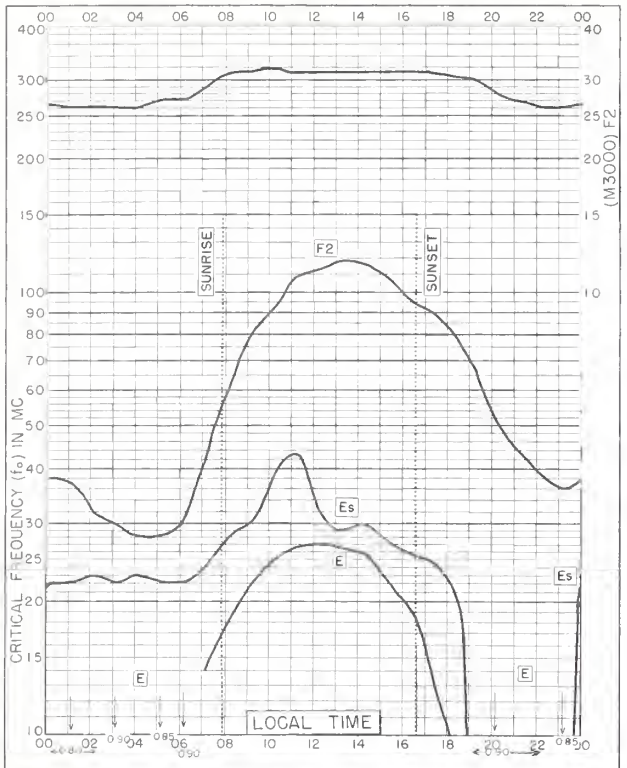


Fig. 29. UPSALA, SWEDEN
59.8°N, 17.6°E FEBRUARY 1960

NBS 503

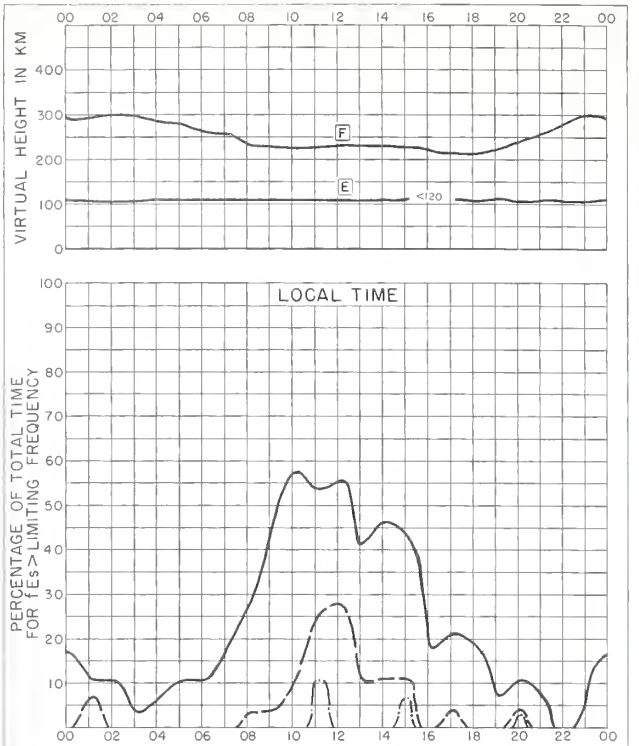


Fig. 30. UPSALA, SWEDEN FEBRUARY 1960

NBS 490

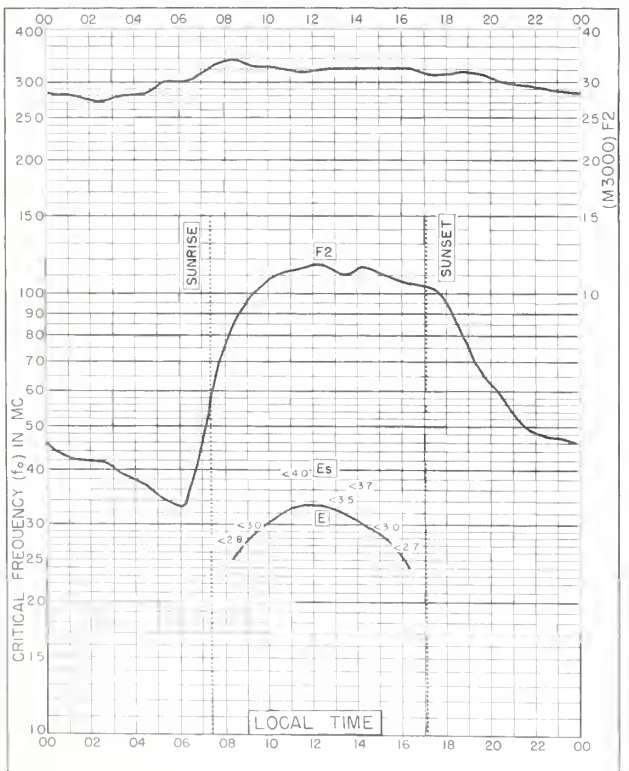


Fig. 31. De BILT, HOLLAND
52.1°N, 5.2°E FEBRUARY 1960

NBS 503

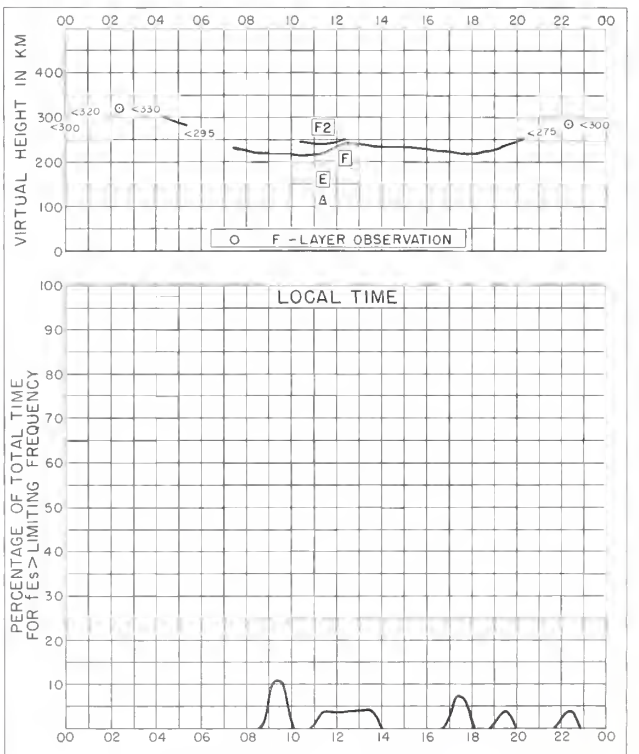


Fig. 32. De BILT, HOLLAND FEBRUARY 1960

NBS 490

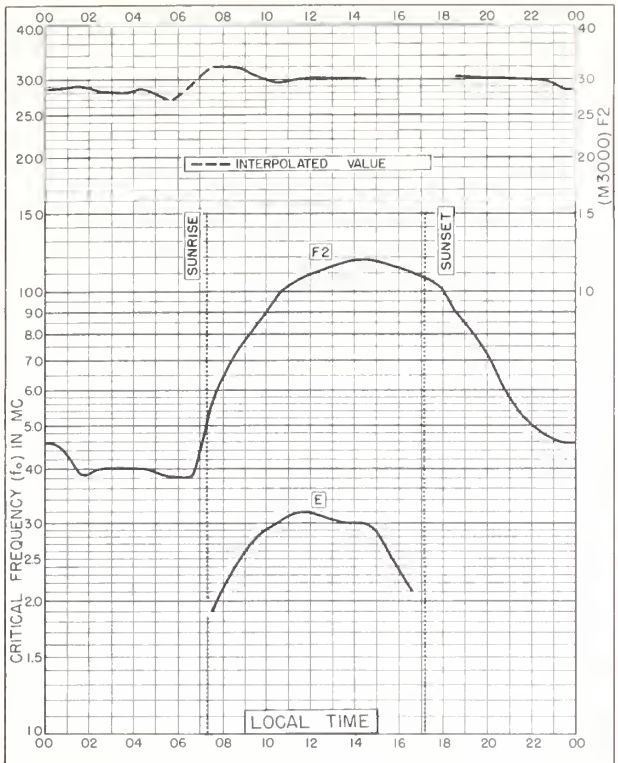


Fig.33. WINNIPEG, CANADA
49.9°N, 97.4°W FEBRUARY 1960

NBS 503

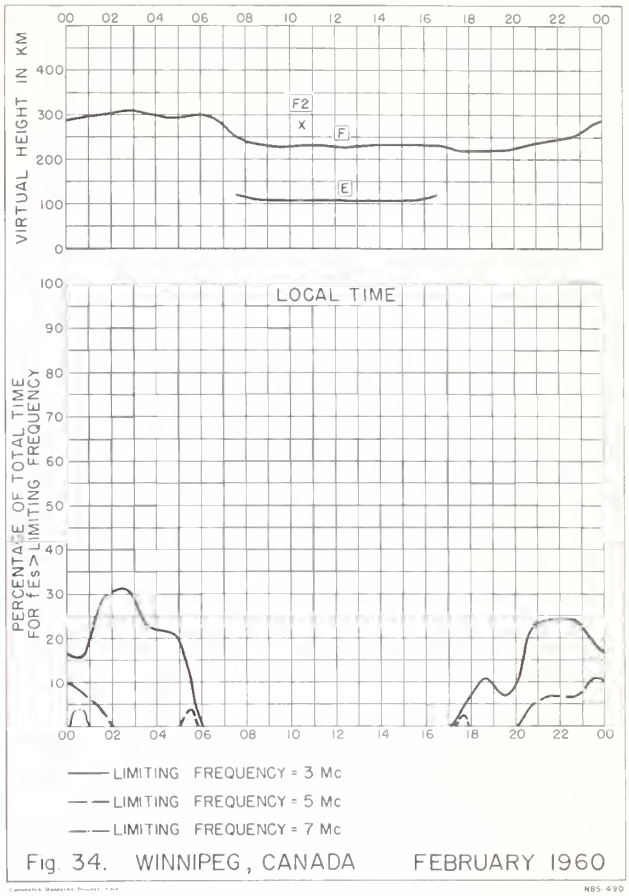


Fig. 34. WINNIPEG, CANADA FEBRUARY 1960

NBS 490

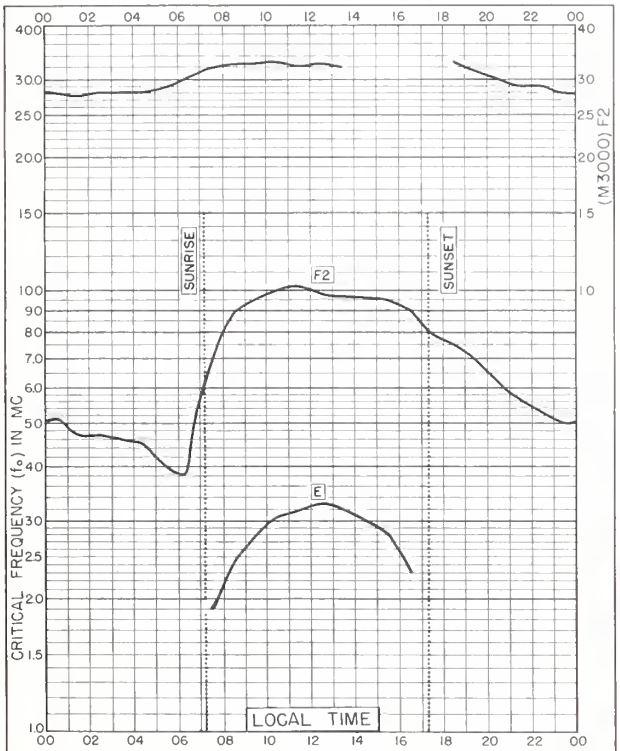
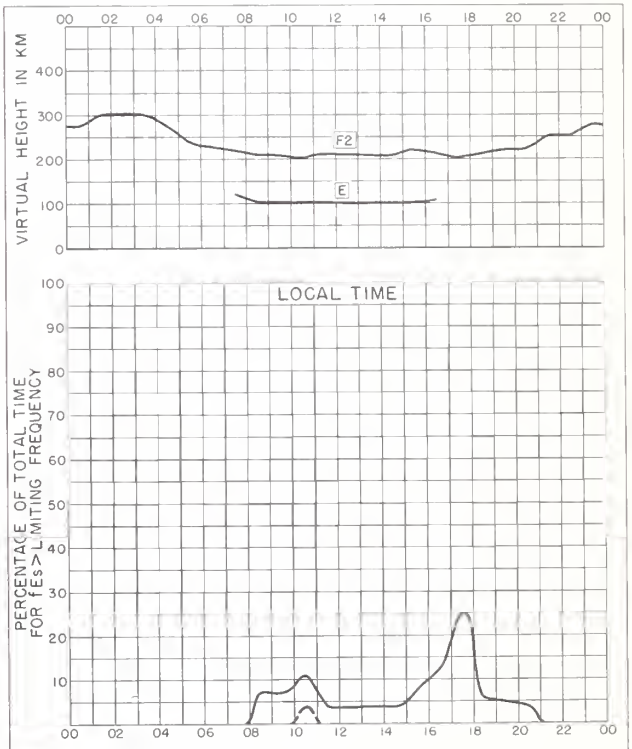


Fig. 35. SOTTENS, SWITZERLAND
46.6°N, 6.7°E FEBRUARY 1960

NBS 503



FEBRUARY 1960

Fig. 36. SOTTENS, SWITZERLAND

NBS 490

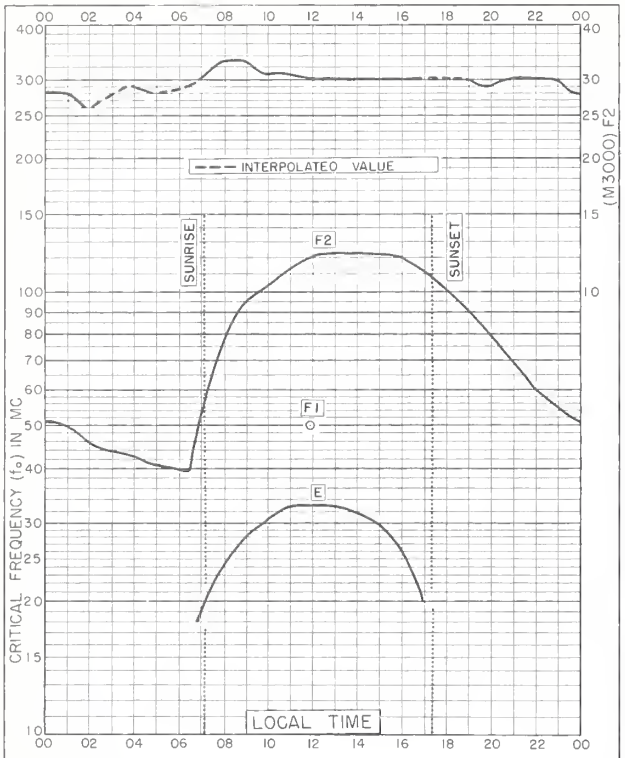


Fig. 37. OTTAWA, CANADA
45.4°N, 75.9°W FEBRUARY 1960

NBS 503

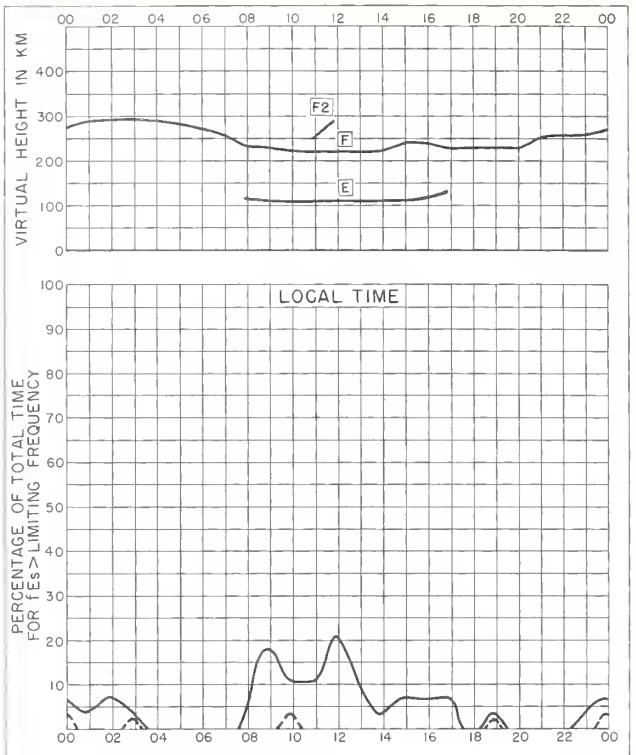


Fig. 38. OTTAWA, CANADA FEBRUARY 1960

NBS 490

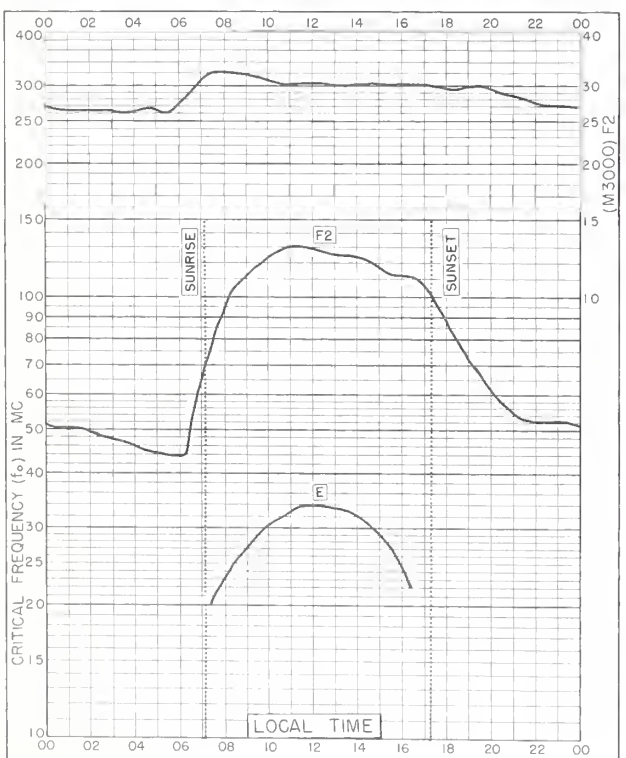


Fig. 39. WAKKANAI, JAPAN
45.4°N, 141.7°E FEBRUARY 1960

NBS 503

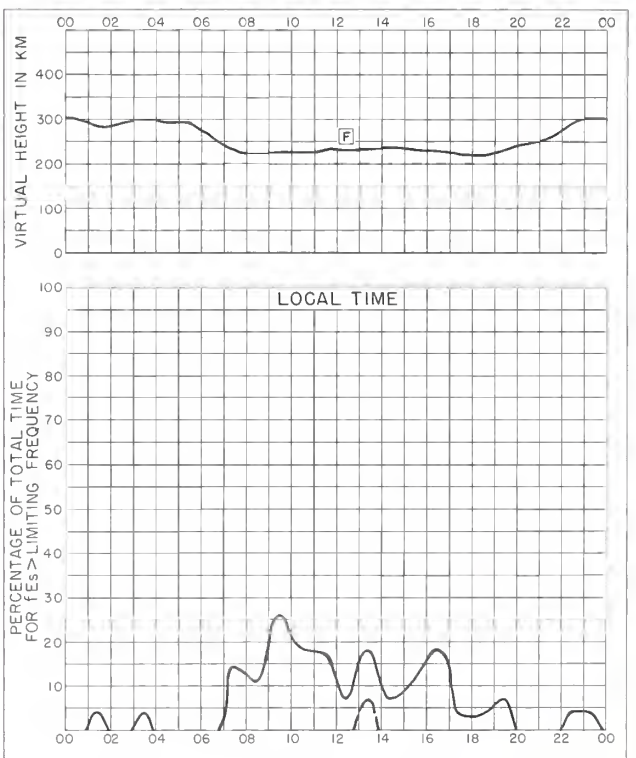


Fig. 40. WAKKANAI, JAPAN FEBRUARY 1960

NBS 490

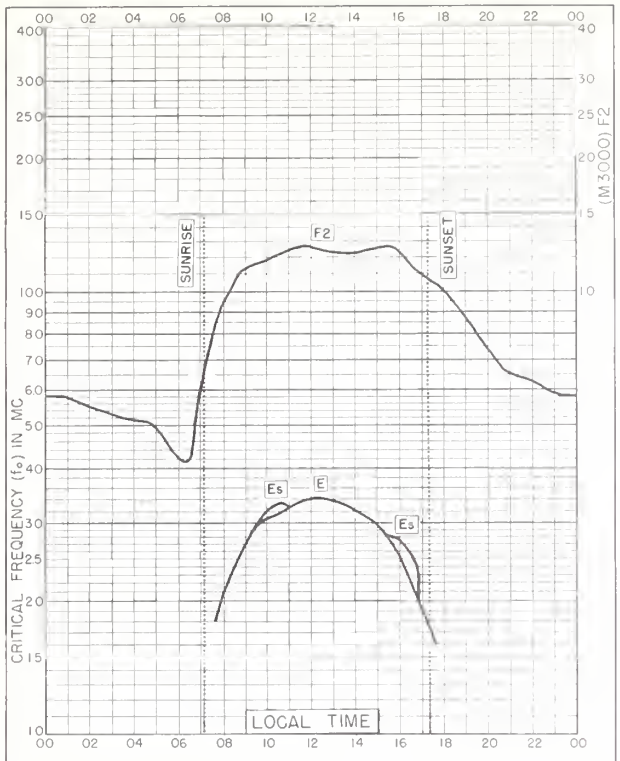
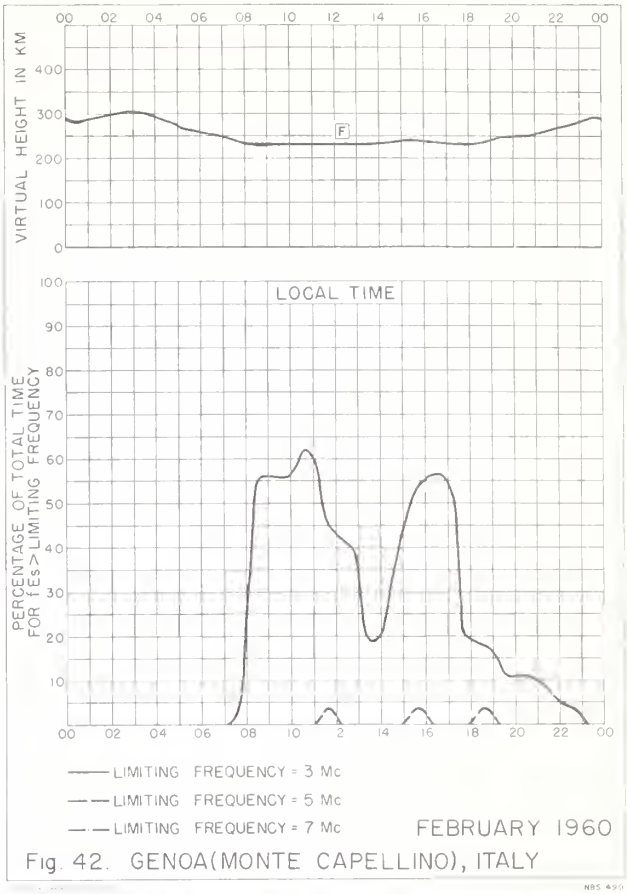


Fig. 41. GENOA(MONTE CAPELLINO), ITALY
44.6°N, 9.0°E FEBRUARY 1960



FEBRUARY 1960

Fig. 42. GENOA(MONTE CAPELLINO), ITALY

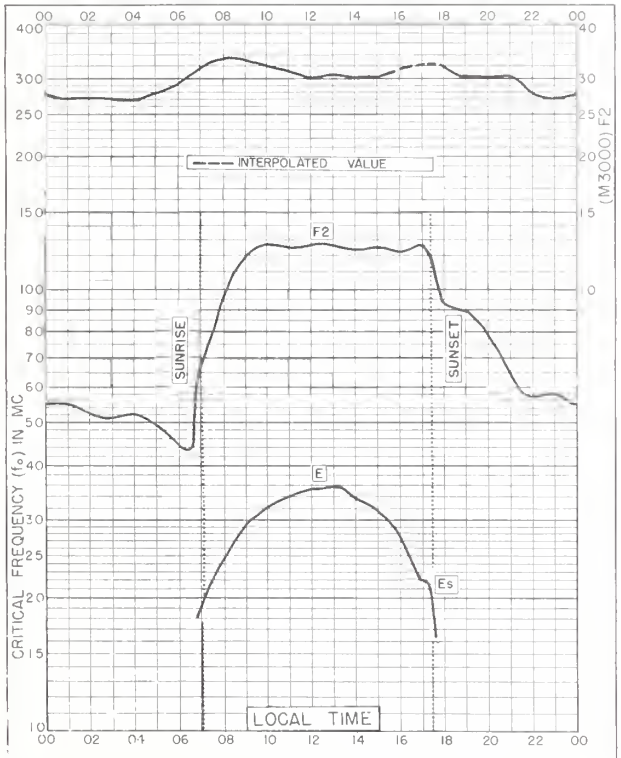


Fig. 43. ROME, ITALY
41.8°N, 12.5°E FEBRUARY 1960

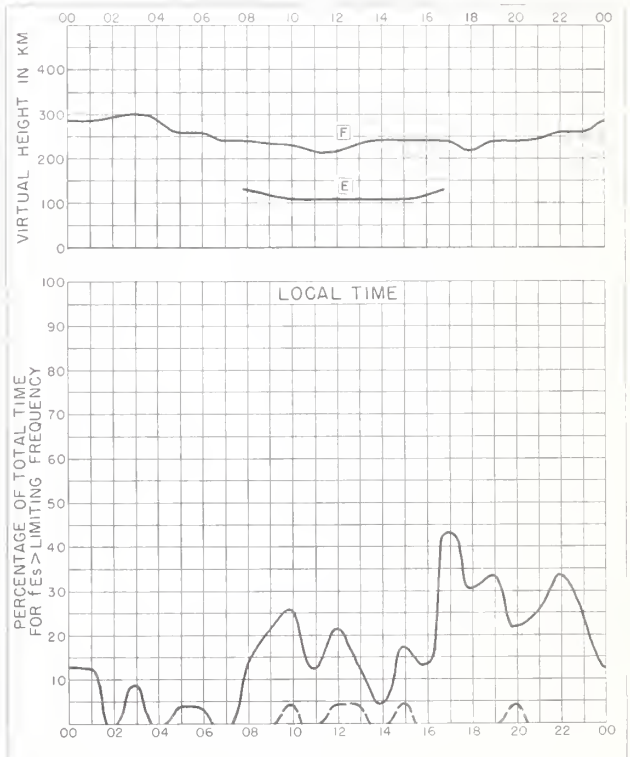


Fig. 44. ROME, ITALY FEBRUARY 1960

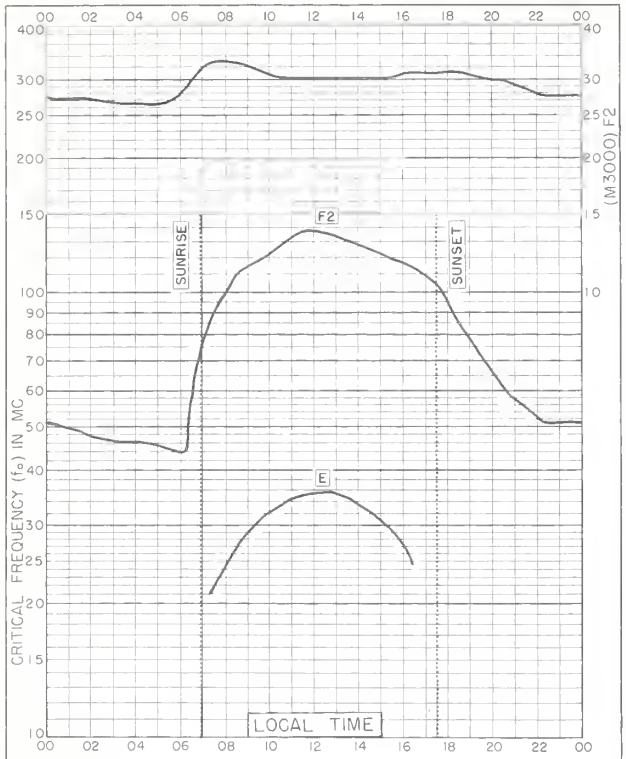


Fig. 45. AKITA, JAPAN
39.7°N, 140.1°E FEBRUARY 1960

NBS 503

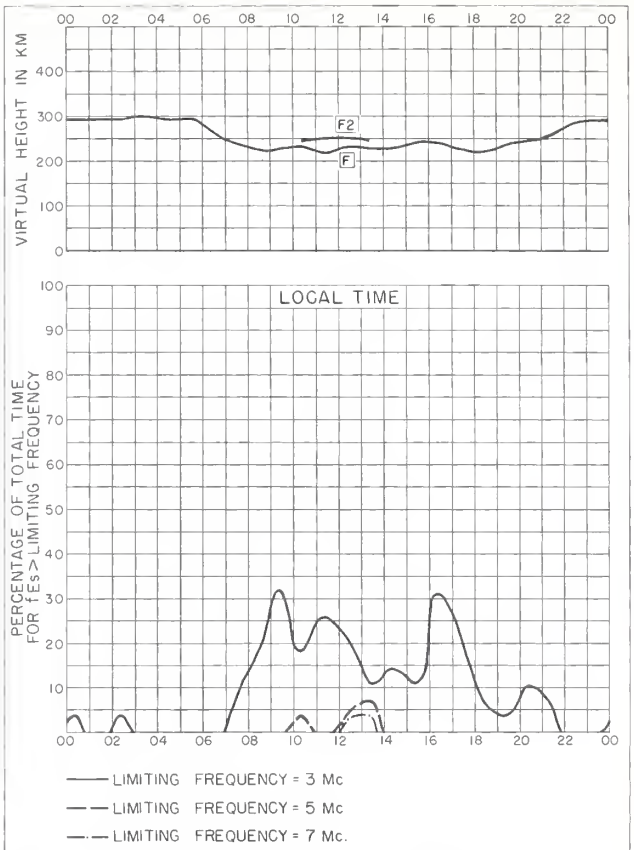


Fig. 46. AKITA, JAPAN FEBRUARY 1960

NBS 490

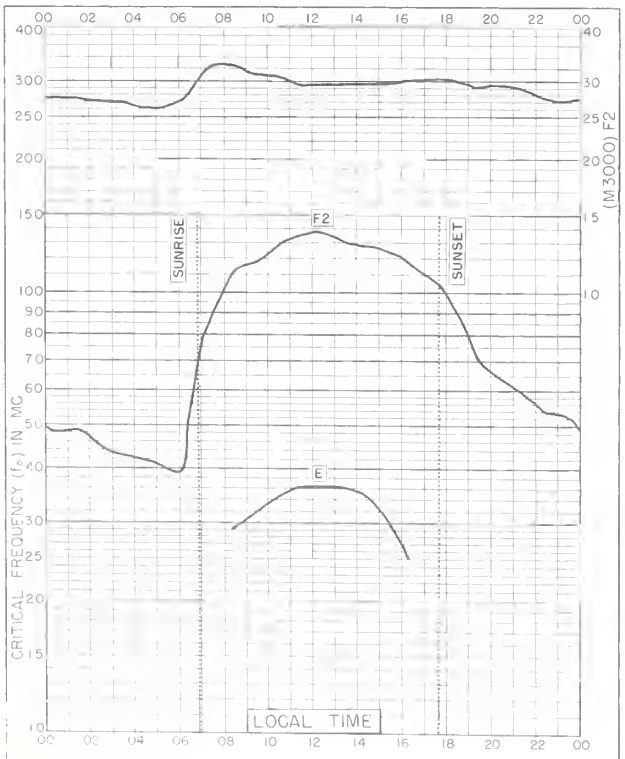


Fig. 47. TOKYO, JAPAN
35.7°N, 139.5°E FEBRUARY 1960

NBS 503

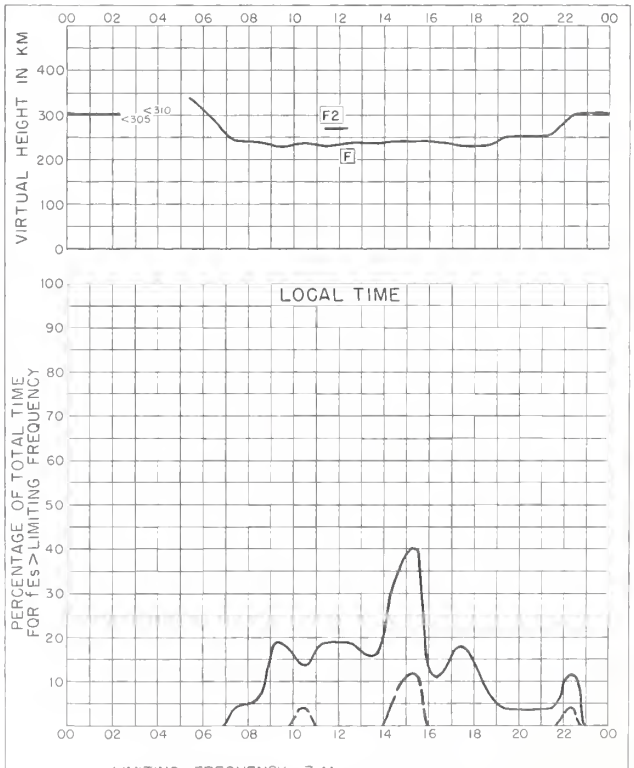


Fig. 48. TOKYO, JAPAN FEBRUARY 1960

NBS 490

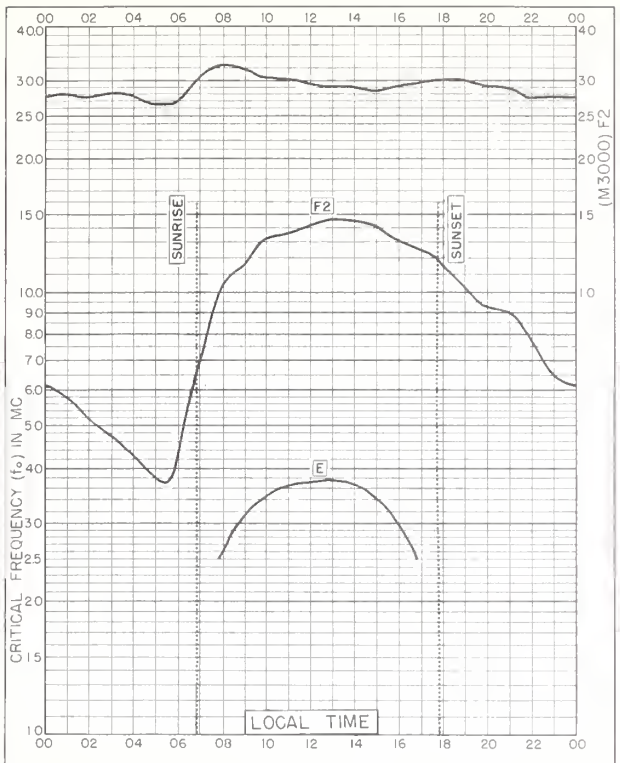


Fig. 49. YAMAGAWA, JAPAN
31.2°N, 130.6°E FEBRUARY 1960

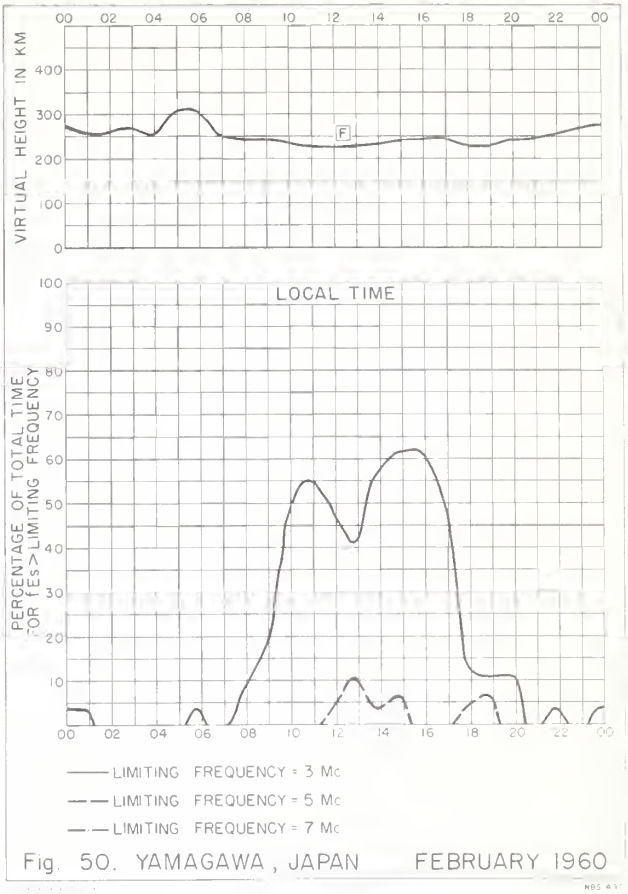


Fig. 50. YAMAGAWA, JAPAN FEBRUARY 1960

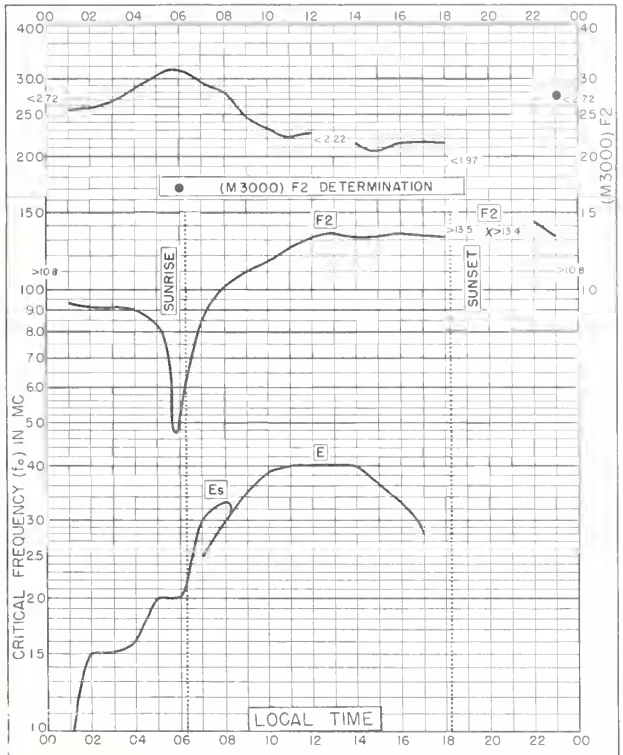


Fig. 51. BUNIA, BELGIAN CONGO
1.5°N, 30.2°E FEBRUARY 1960

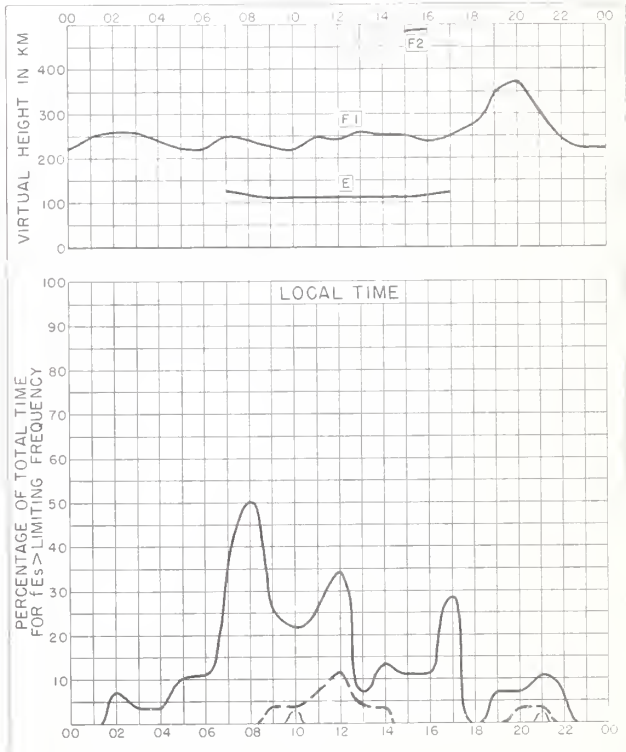


Fig. 52. BUNIA, BELGIAN CONGO FEBRUARY 1960

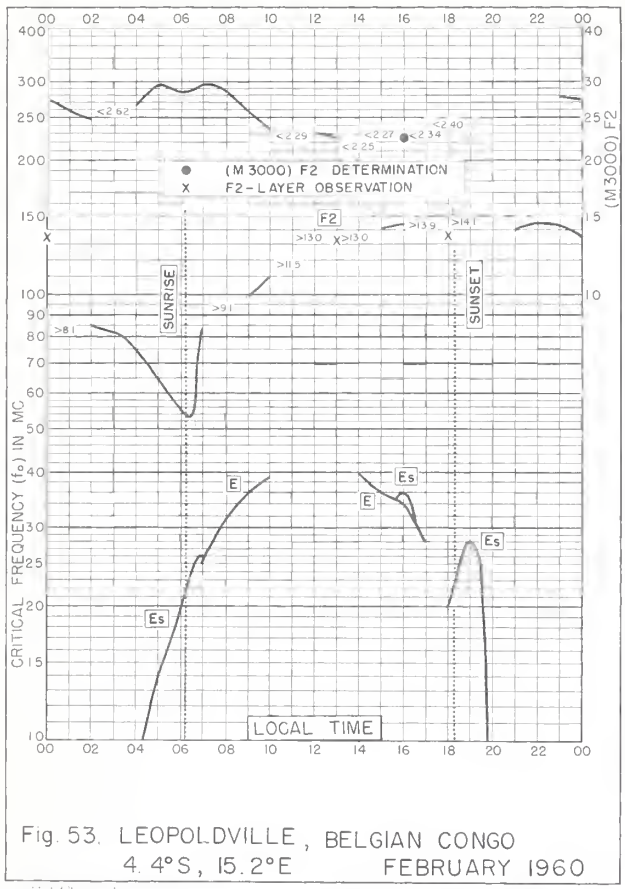
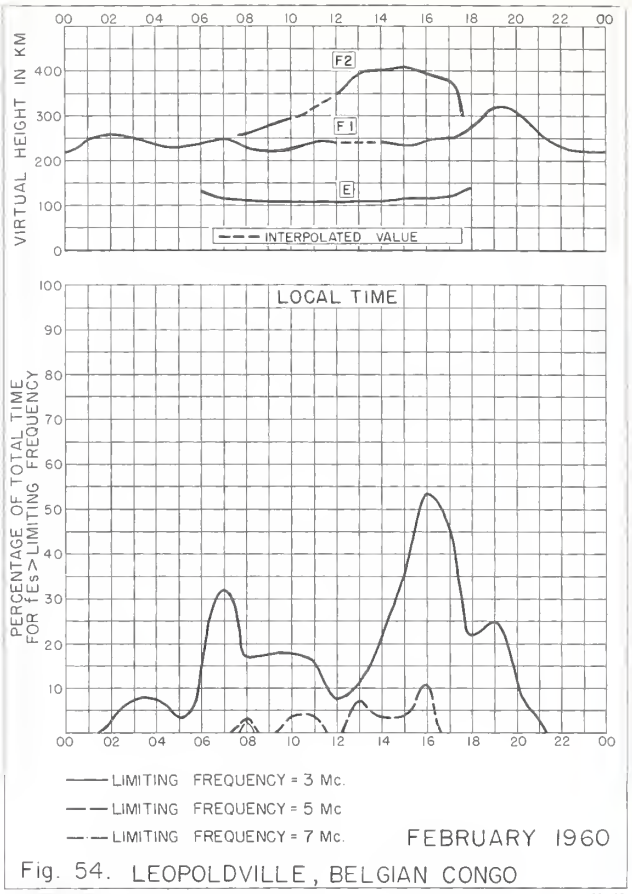


Fig. 53. LEOPOLDVILLE, BELGIAN CONGO
4.4°S, 15.2°E FEBRUARY 1960



FEBRUARY 1960

Fig. 54. LEOPOLDVILLE, BELGIAN CONGO

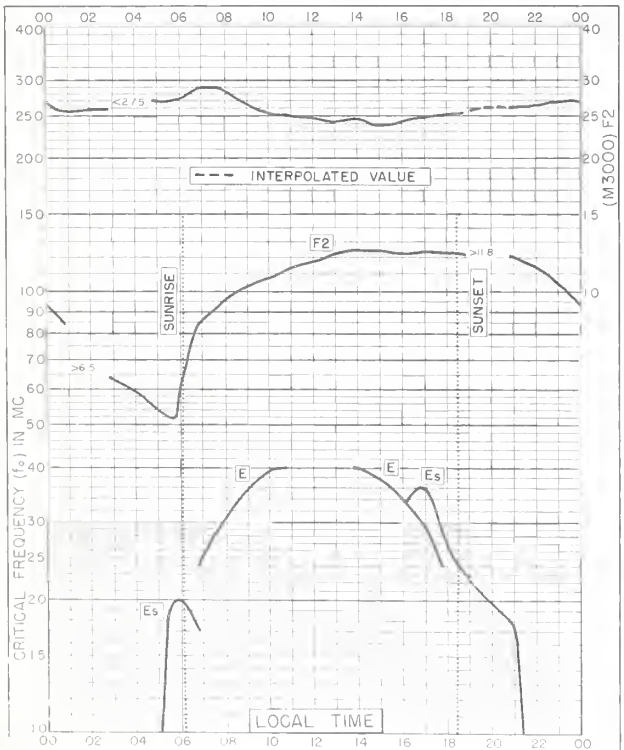
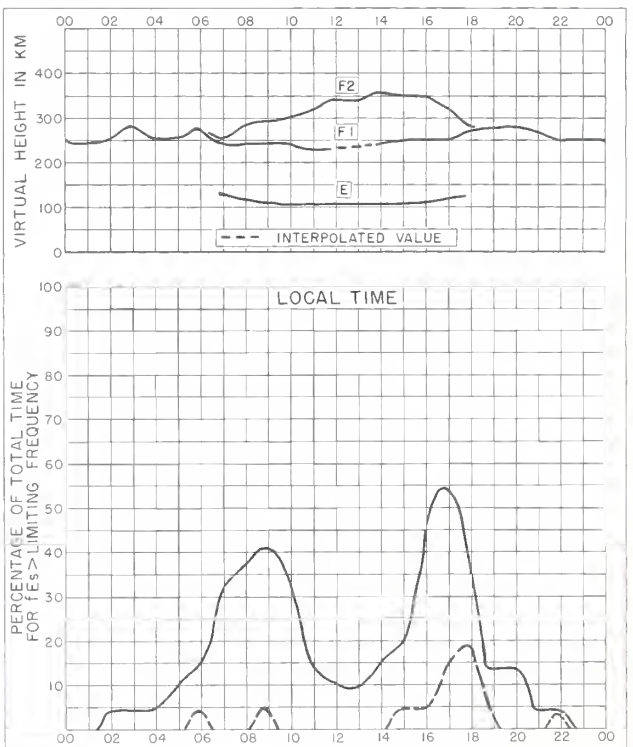


Fig 55. ELISABETHVILLE, BELGIAN CONGO
11.6°S, 27.5°E FEBRUARY 1960



FEBRUARY 1960

Fig. 56. ELISABETHVILLE, BELGIAN CONGO

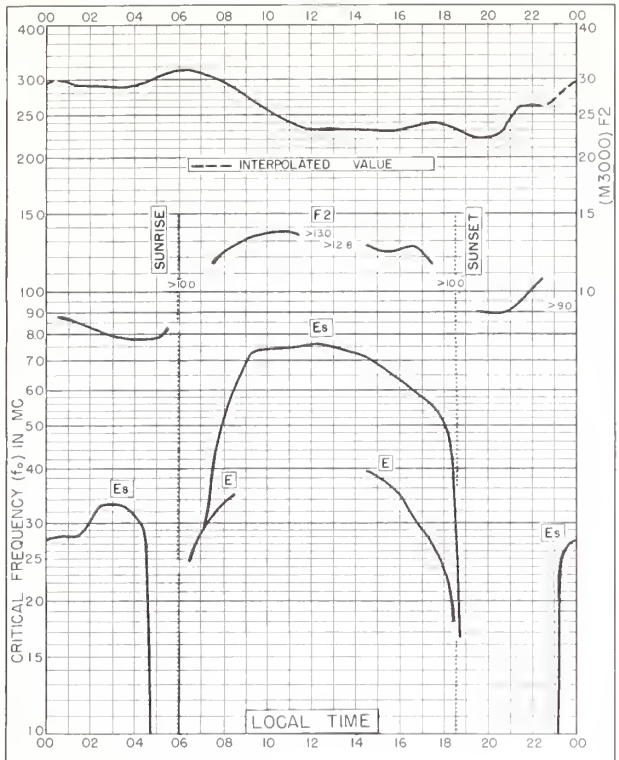


Fig. 57. La PAZ, BOLIVIA
16.5°S, 68.1°W FEBRUARY 1960

NBS 503

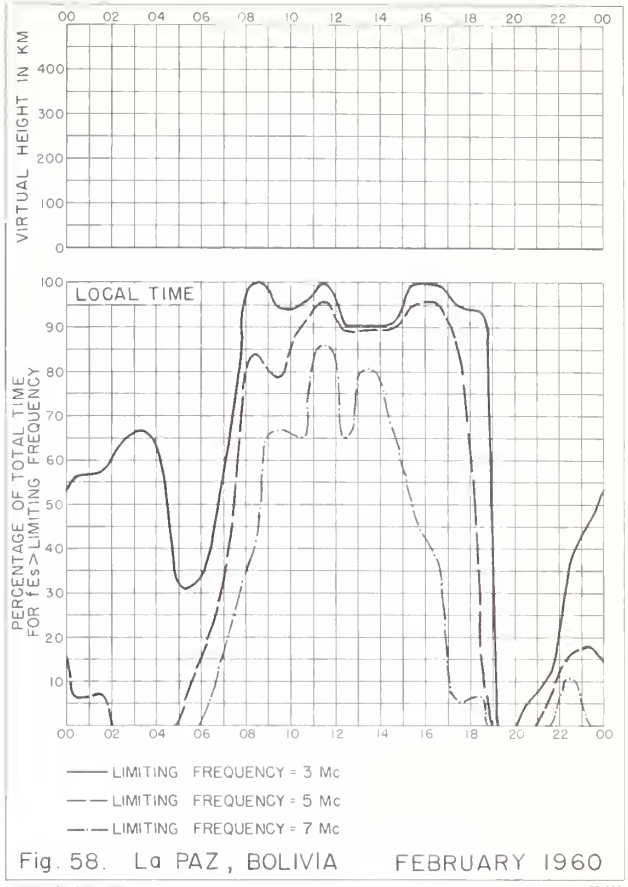


Fig. 58. La PAZ, BOLIVIA FEBRUARY 1960

NBS 490

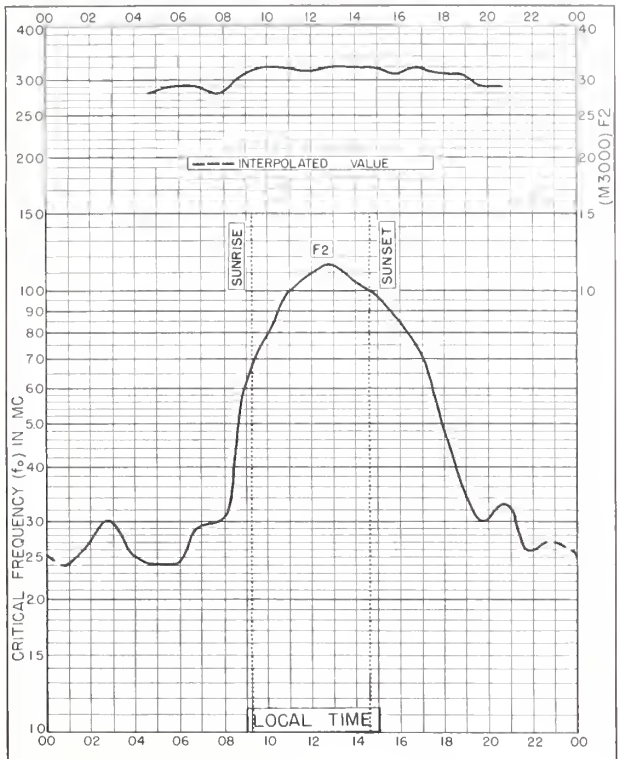


Fig. 59. NURMIJARVI, FINLAND
60.5°N, 24.6°E DECEMBER 1959

NBS 503

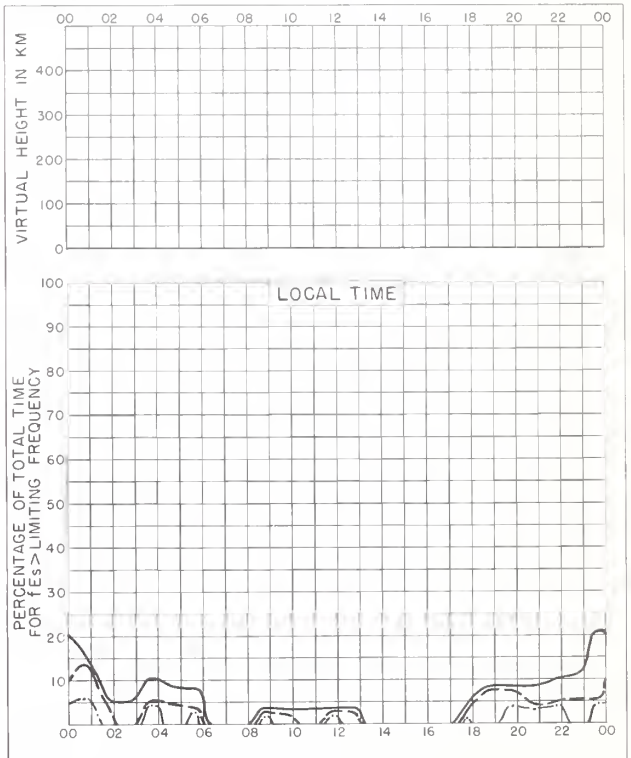


Fig. 60. NURMIJARVI, FINLAND DECEMBER 1959

NBS 490

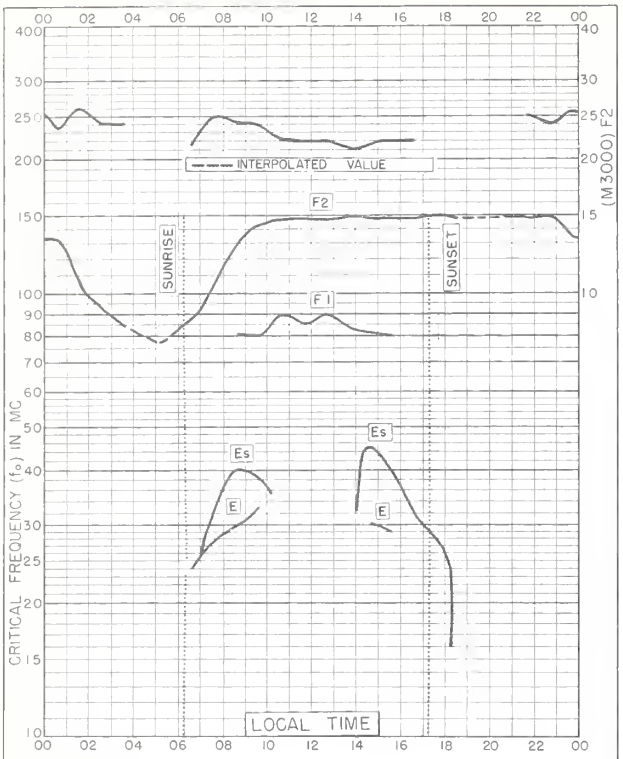


Fig. 61. MACAU
22.2°N, 113.6°E NOVEMBER 1959

NBS 503

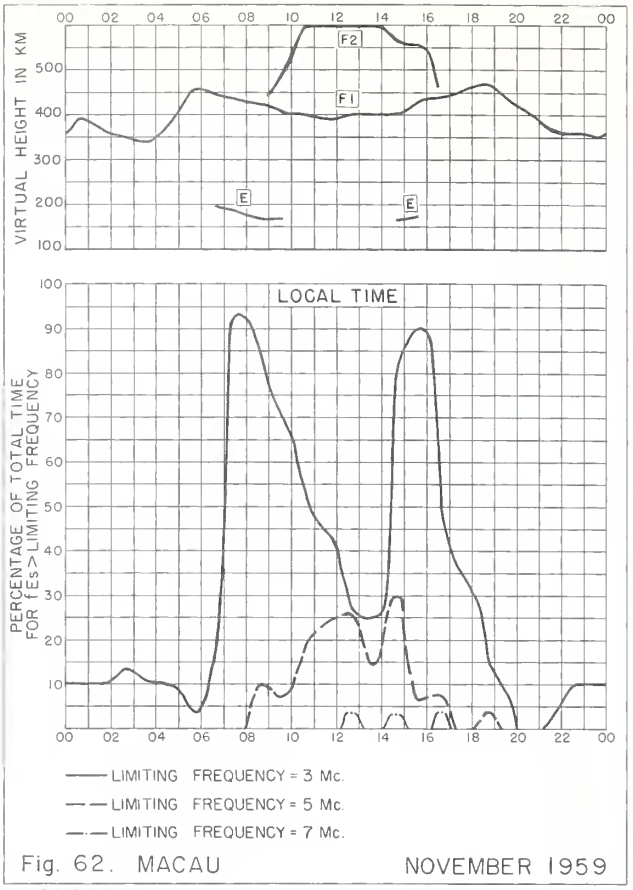


Fig. 62. MACAU NOVEMBER 1959

NBS 490

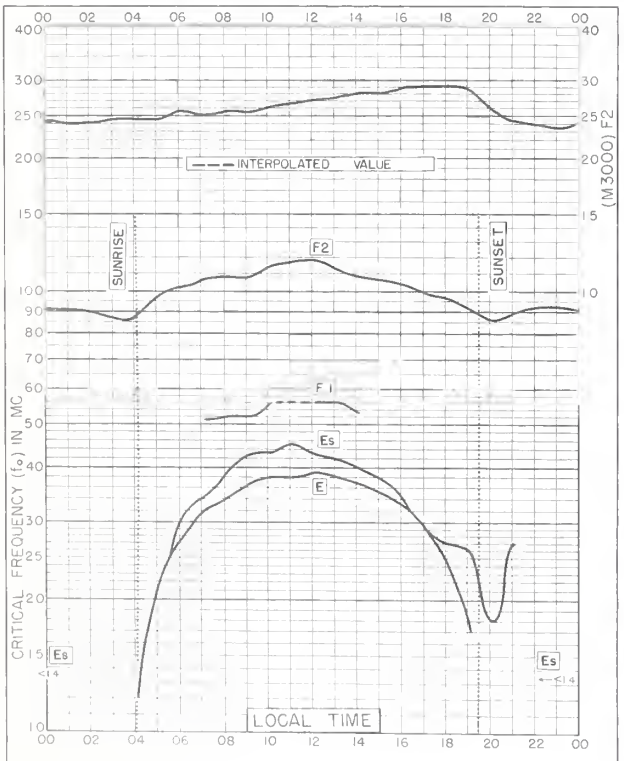


Fig 63. FALKLAND IS.
51.7°S, 57.8°W NOVEMBER 1959

NBS 503

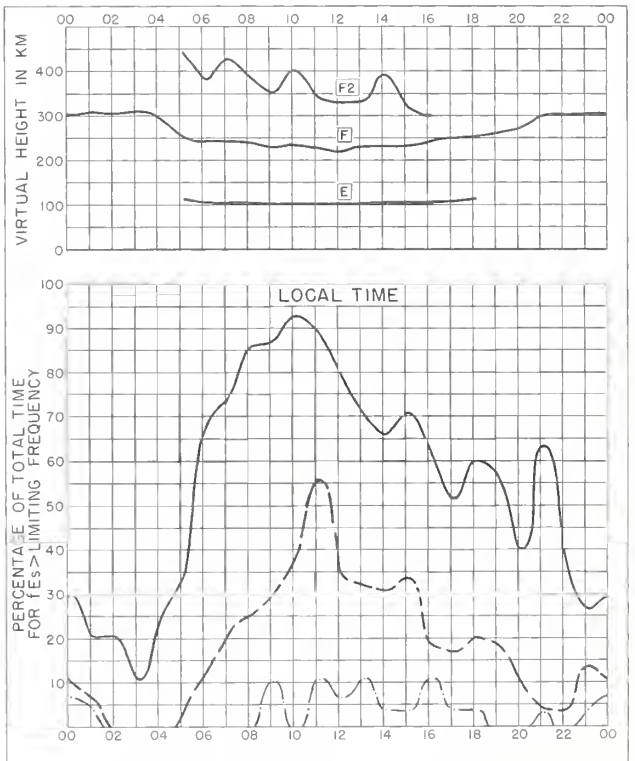


Fig. 64. FALKLAND IS. NOVEMBER 1959

NBS 490

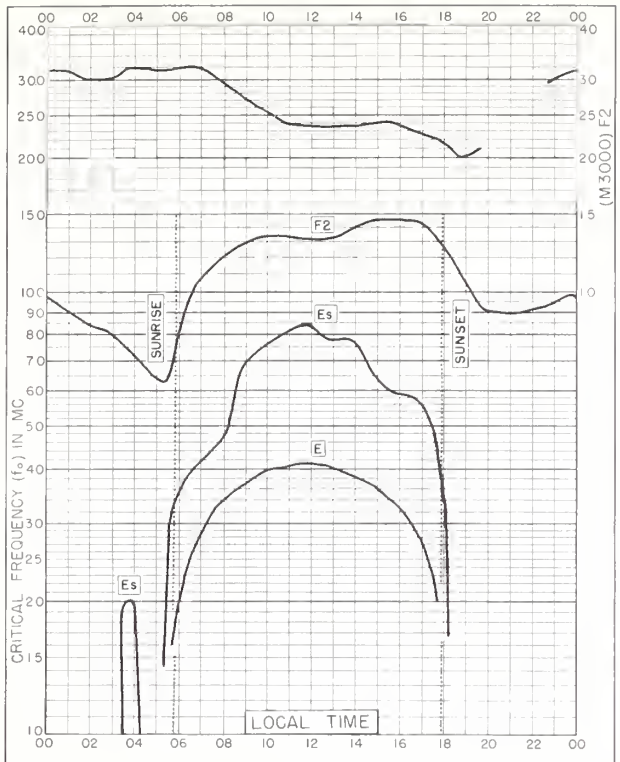


Fig. 65. NATAL, BRAZIL
5.3°S, 35.1°W OCTOBER 1959

NBS 503

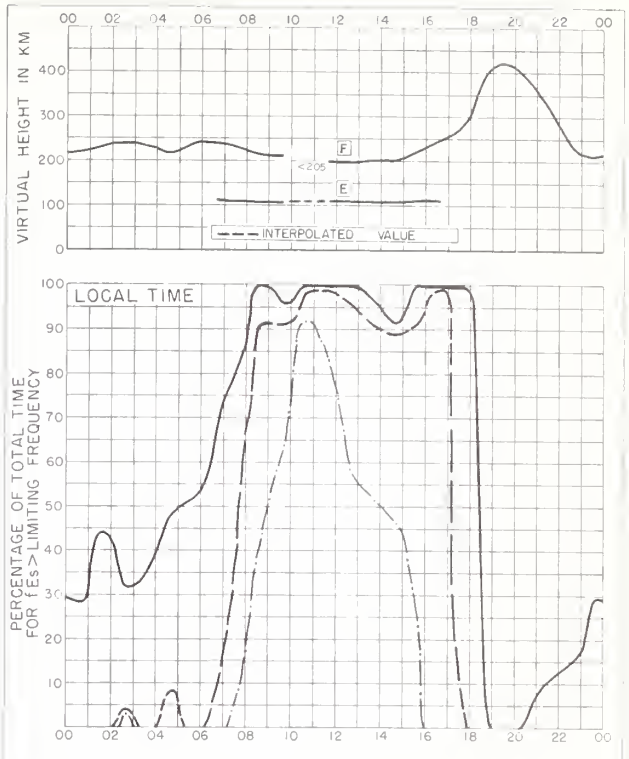


Fig. 66. NATAL, BRAZIL OCTOBER 1959

NBS 490

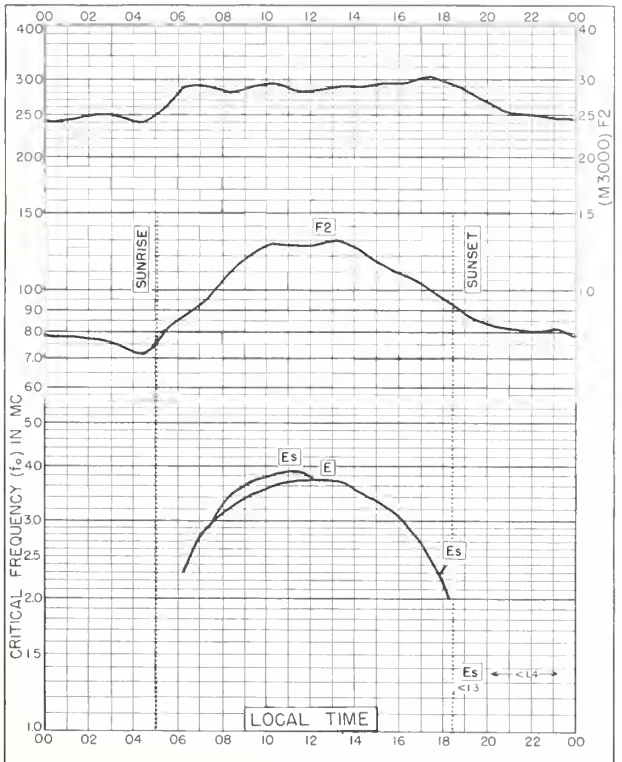


Fig. 67. FALKLAND IS.
51.7°S, 57.8°W OCTOBER 1959

NBS 503

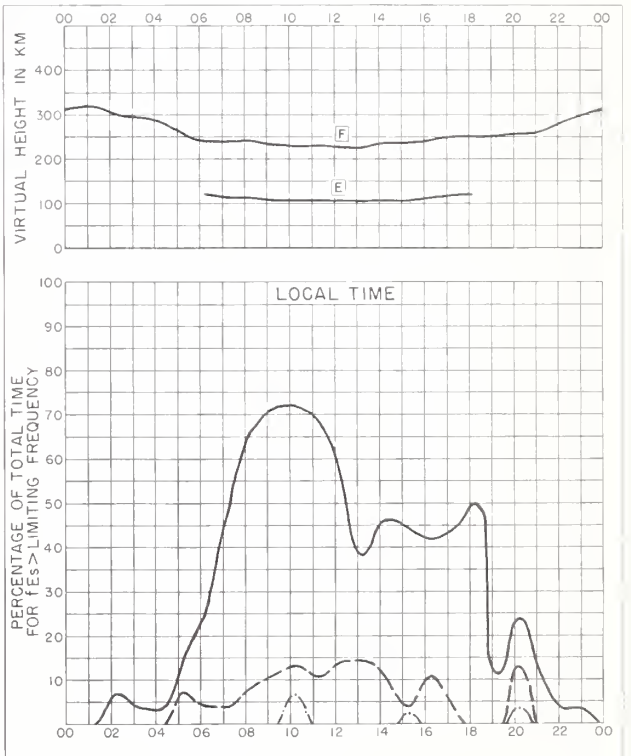


Fig. 68. FALKLAND IS. OCTOBER 1959

NBS 490

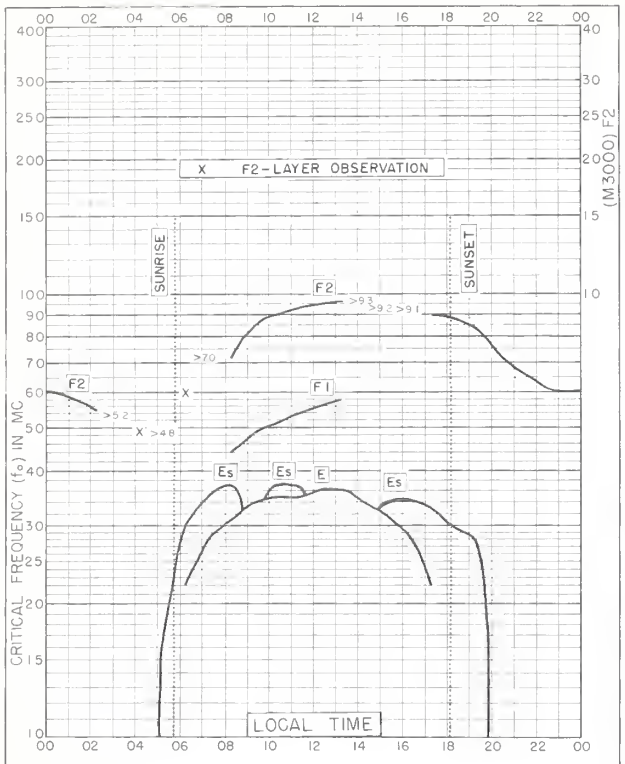


Fig. 69. BUDAPEST, HUNGARY
47.4°N, 19.2°E SEPTEMBER 1959

NBS 503

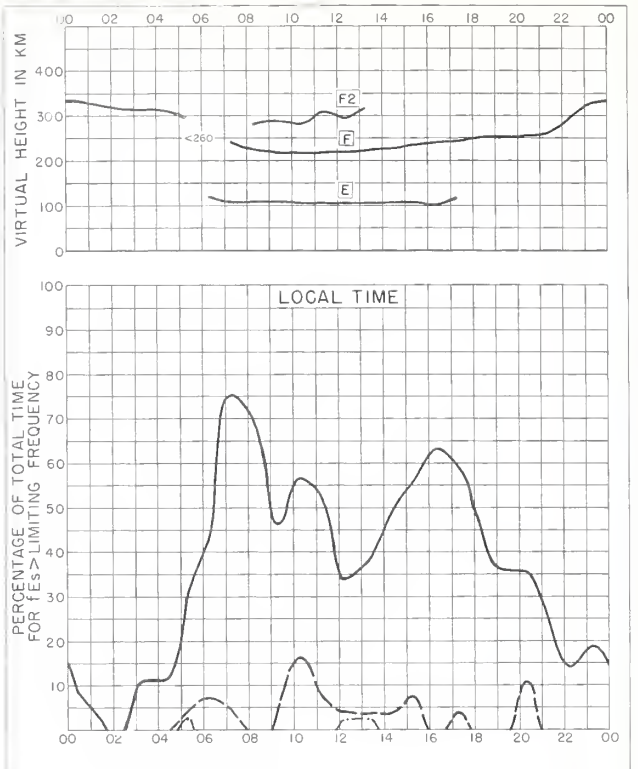


Fig. 70. BUDAPEST, HUNGARY SEPTEMBER 1959

NBS 490

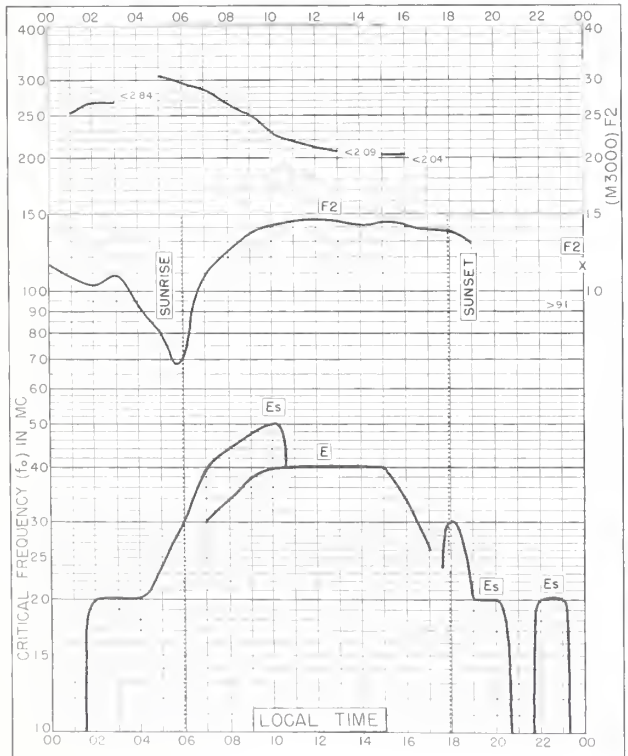


Fig. 71. BUNIA, BELGIAN CONGO
1.5°N, 30.2°E SEPTEMBER 1959

NBS 503

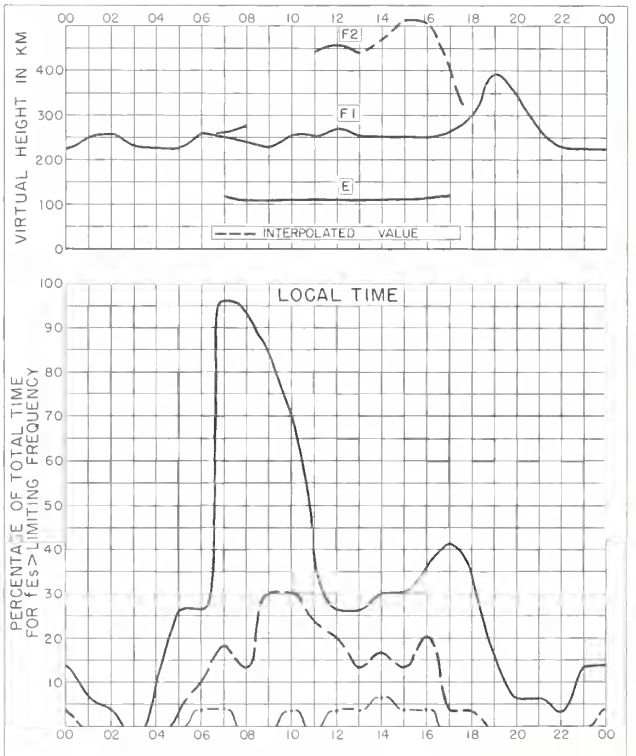


Fig. 72. BUNIA, BELGIAN CONGO SEPTEMBER 1959

NBS 490

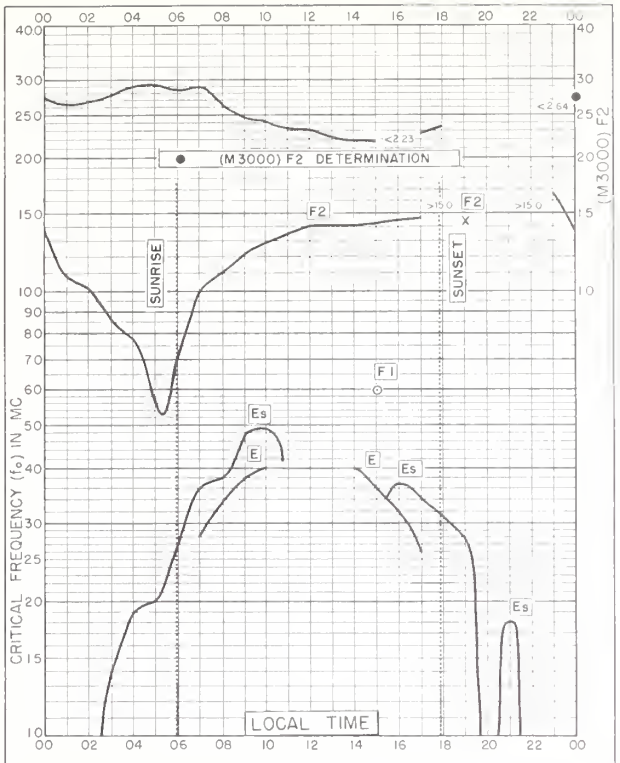
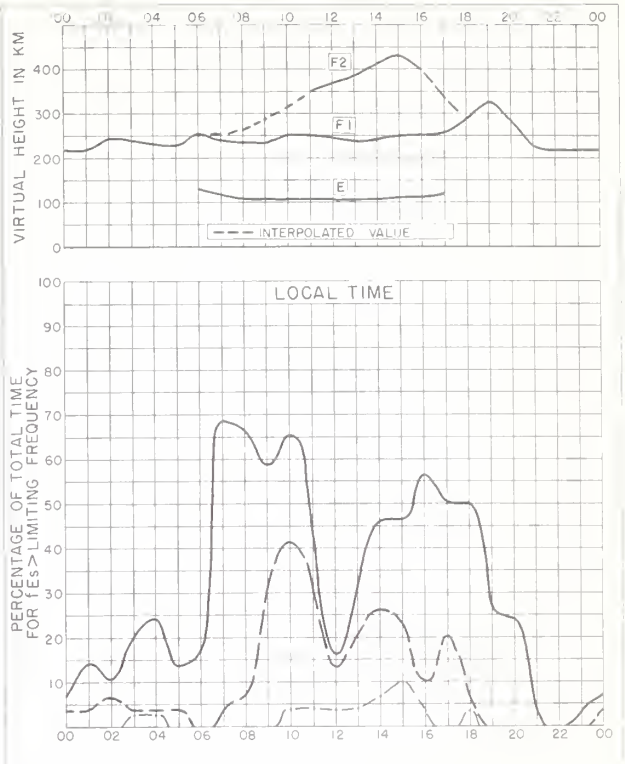


Fig. 73. LEOPOLDVILLE, BELGIAN CONGO
4.4°S, 15.2°E SEPTEMBER 1959



SEPTEMBER 1959

Fig. 74. LEOPOLDVILLE, BELGIAN CONGO

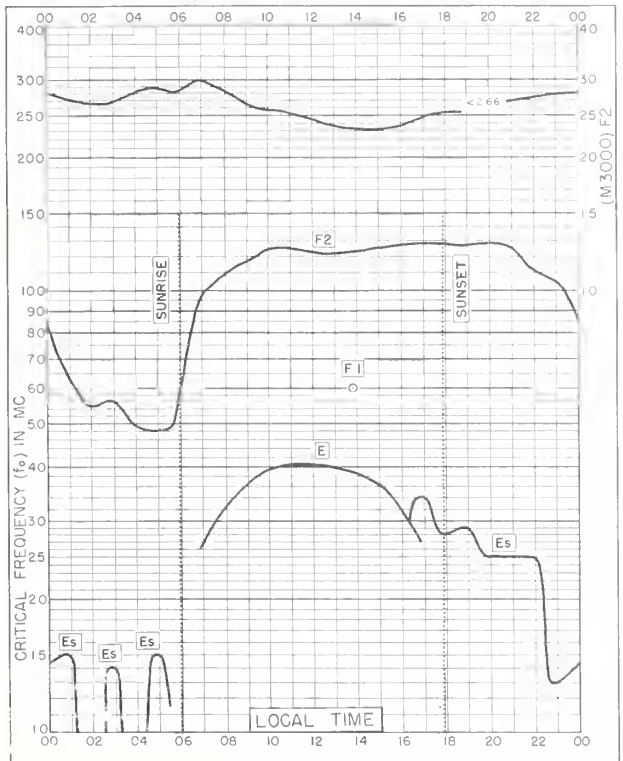
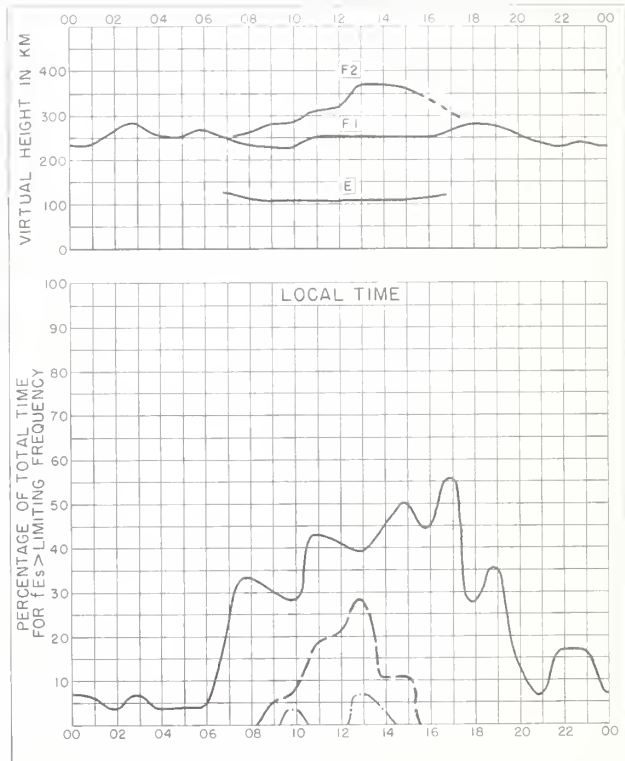


Fig. 75. ELISABETHVILLE, BELGIAN CONGO
11.6°S, 27.5°E SEPTEMBER 1959



SEPTEMBER 1959

Fig. 76. ELISABETHVILLE, BELGIAN CONGO

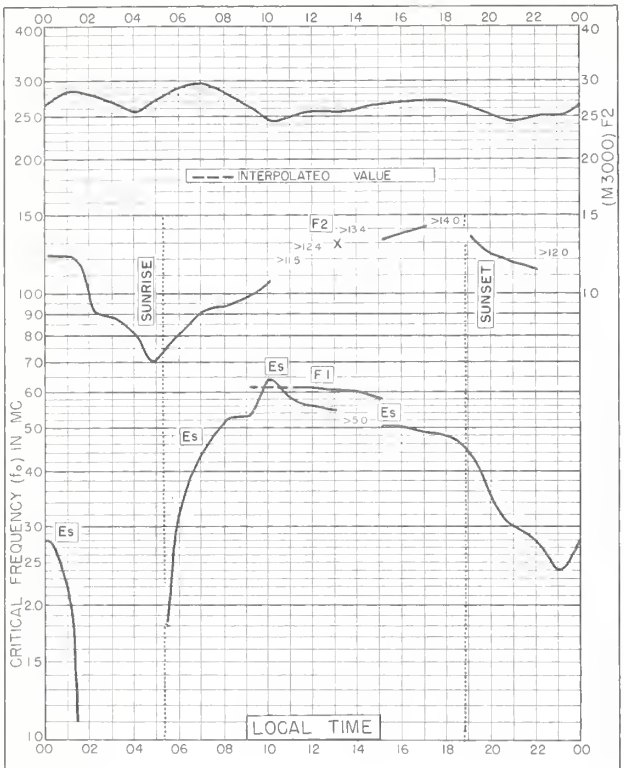


Fig. 77. FORMOSA, CHINA
25.0°N, 121.5°E JULY 1959

NBS 503

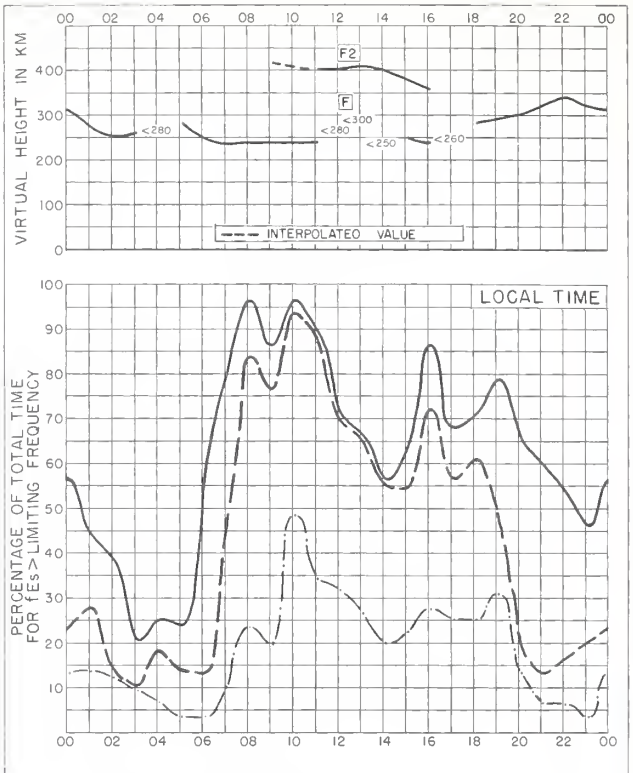


Fig. 78. FORMOSA, CHINA JULY 1959

NBS 490

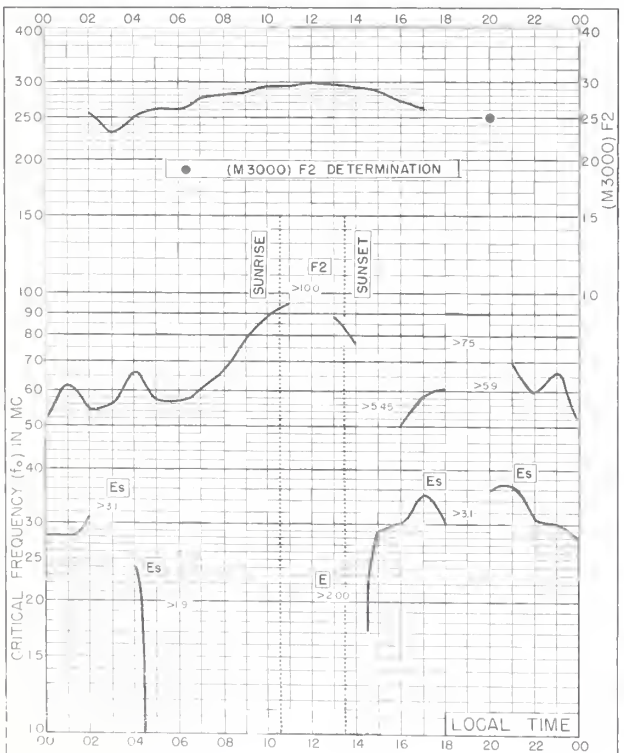


Fig. 79. BYRD STATION
80.0°S, 120.0°W APRIL 1959

NBS 503

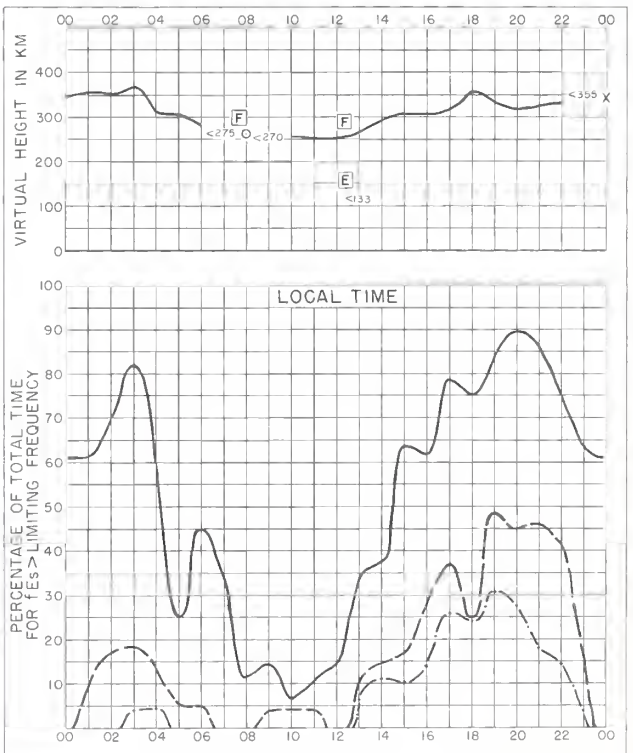


Fig. 80. BYRD STATION APRIL 1959

NBS 490

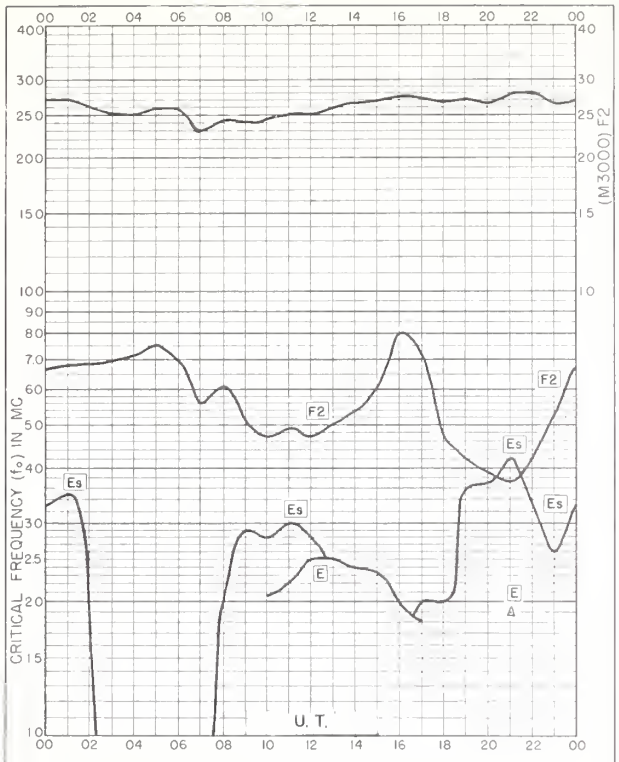


Fig. 81. POLE STATION
90.0°S APRIL 1959

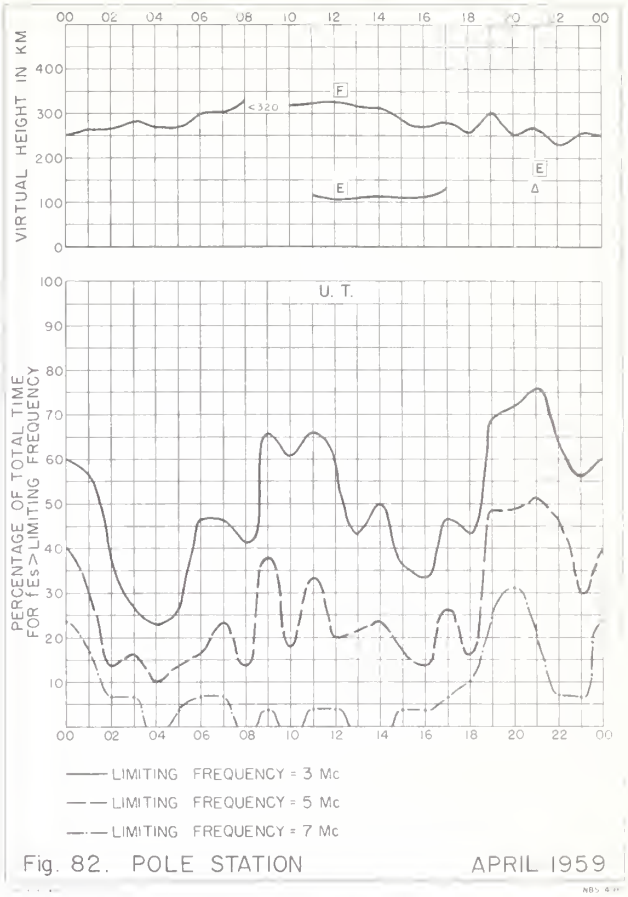


Fig. 82. POLE STATION APRIL 1959

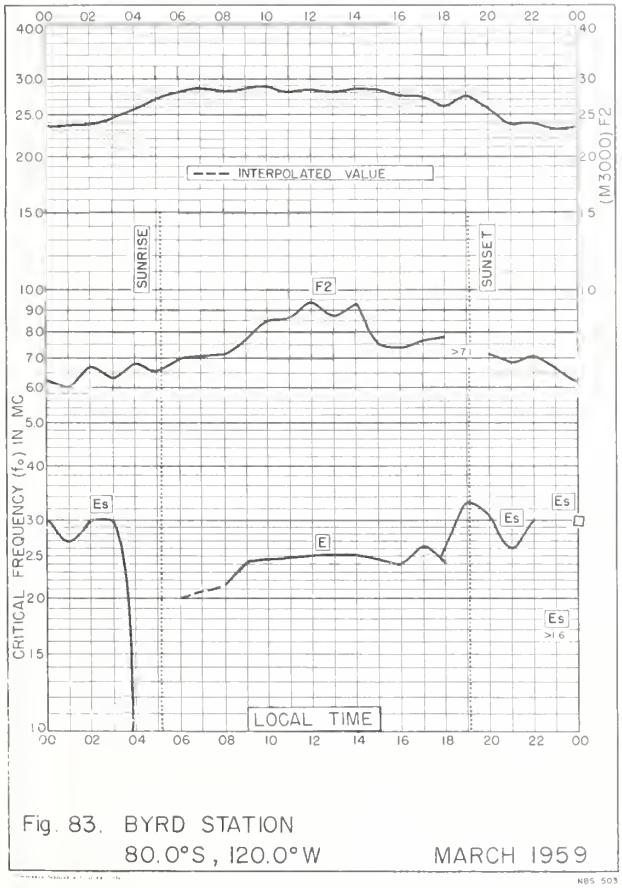


Fig. 83. BYRD STATION
80.0°S, 120.0°W MARCH 1959

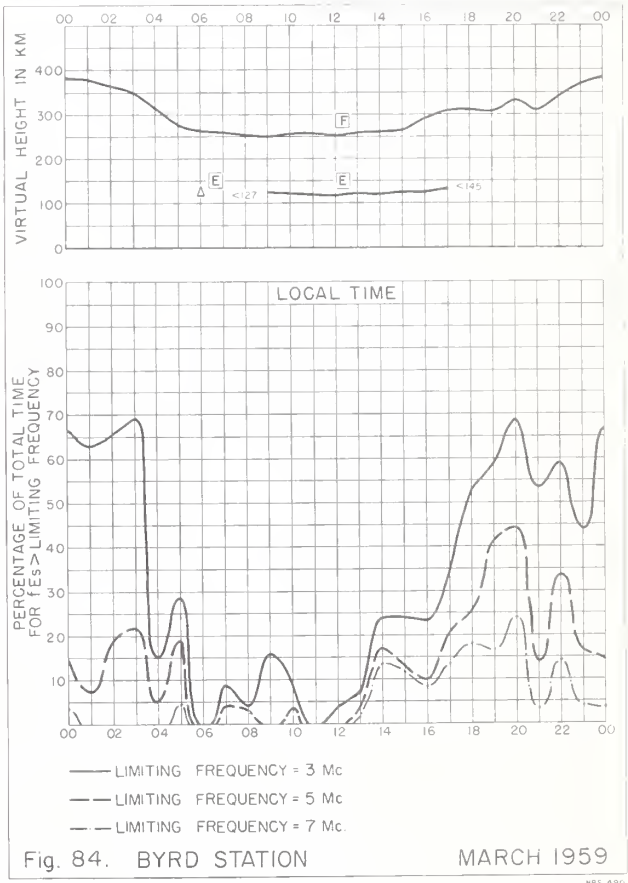


Fig. 84. BYRD STATION MARCH 1959

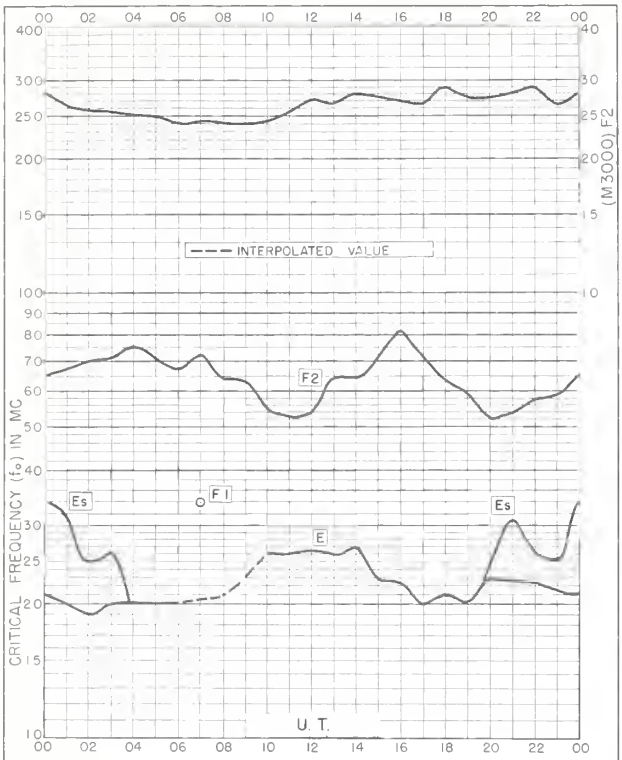


Fig. 85. POLE STATION
90.0°S MARCH 1959

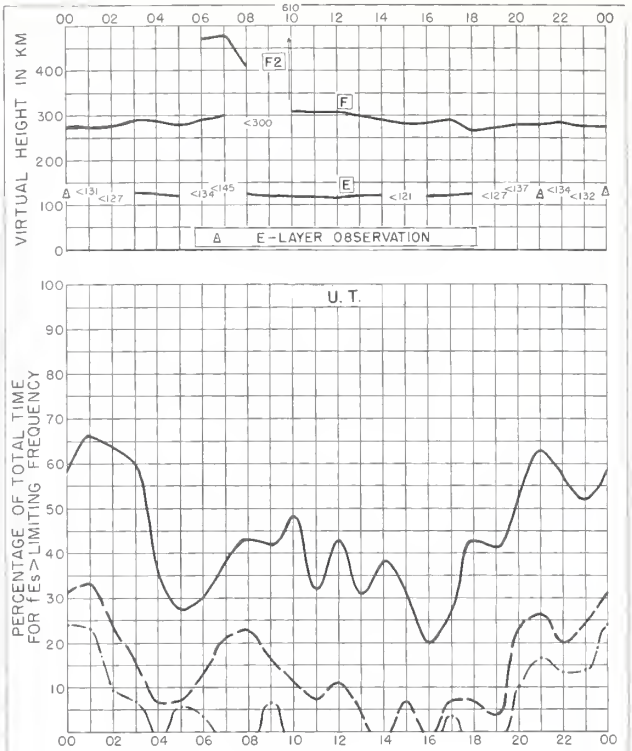


Fig. 86. POLE STATION MARCH 1959

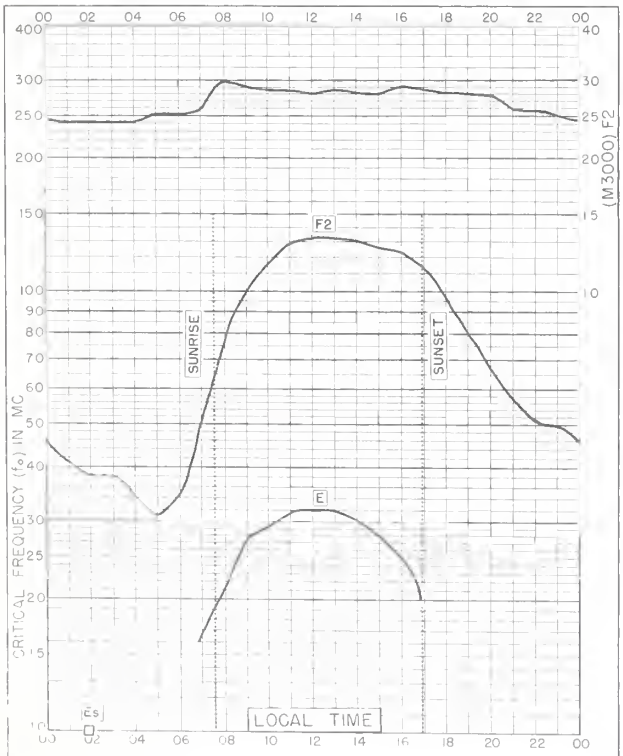


Fig. 87. JULIUSRUH/RÜGEN, GERMANY
54.6°N, 13.4°E FEBRUARY 1959

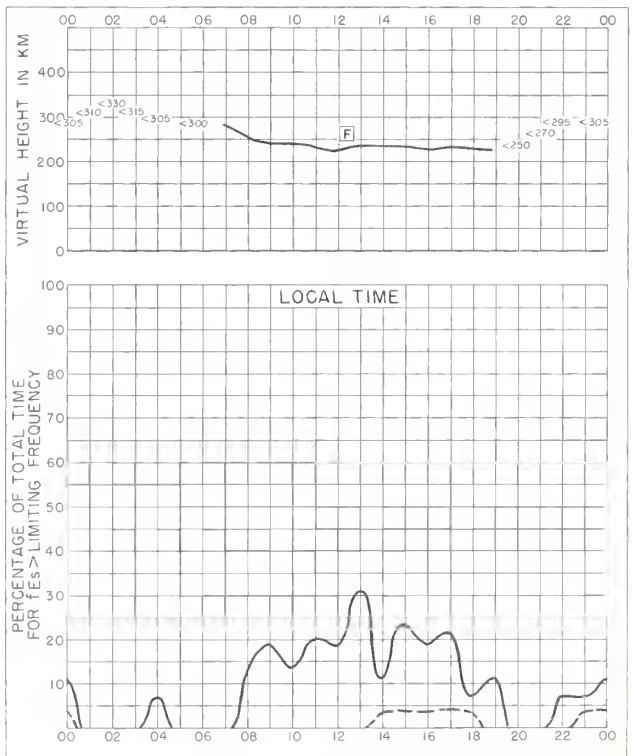


Fig. 88. JULIUSRUH/RÜGEN, GERMANY FEBRUARY 1959

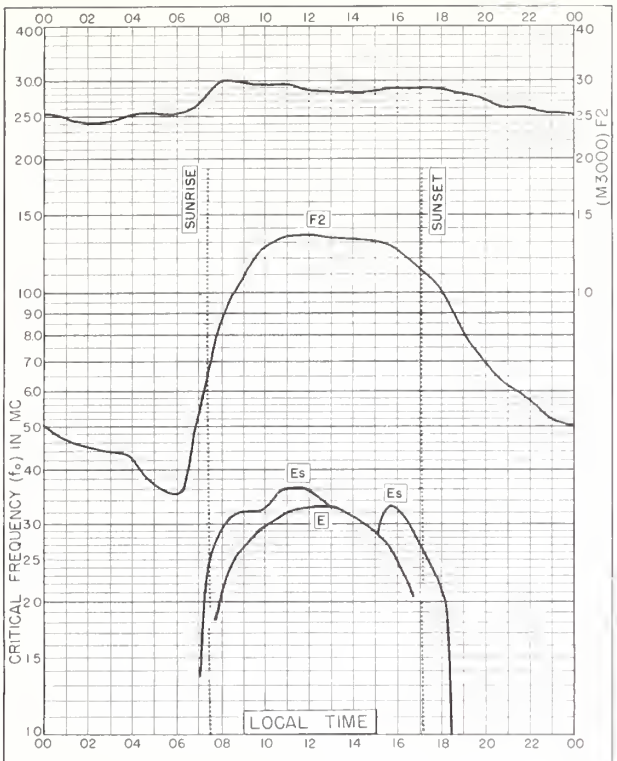


Fig. 89. LINDAU / HARZ, GERMANY
51.6°N, 10.1°E FEBRUARY 1959

NBS 503

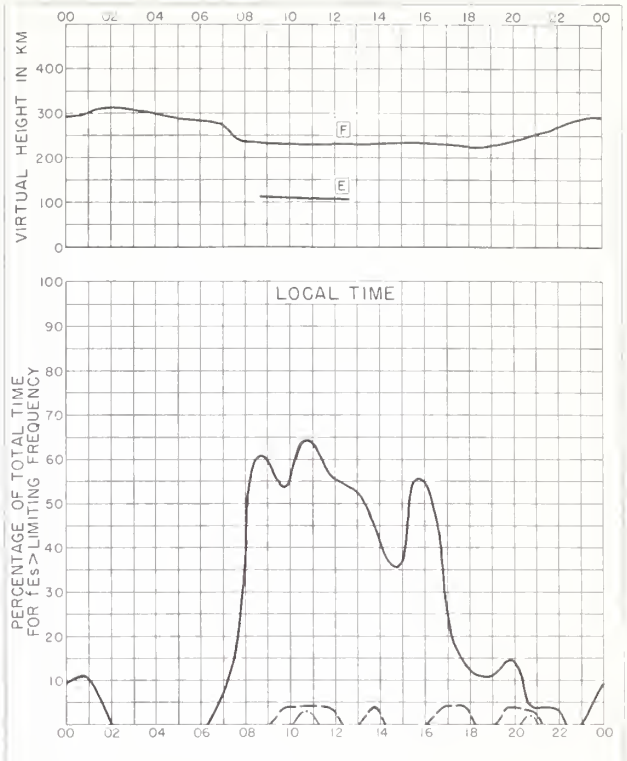


Fig. 90. LINDAU / HARZ, GERMANY FEBRUARY 1959

NBS 490

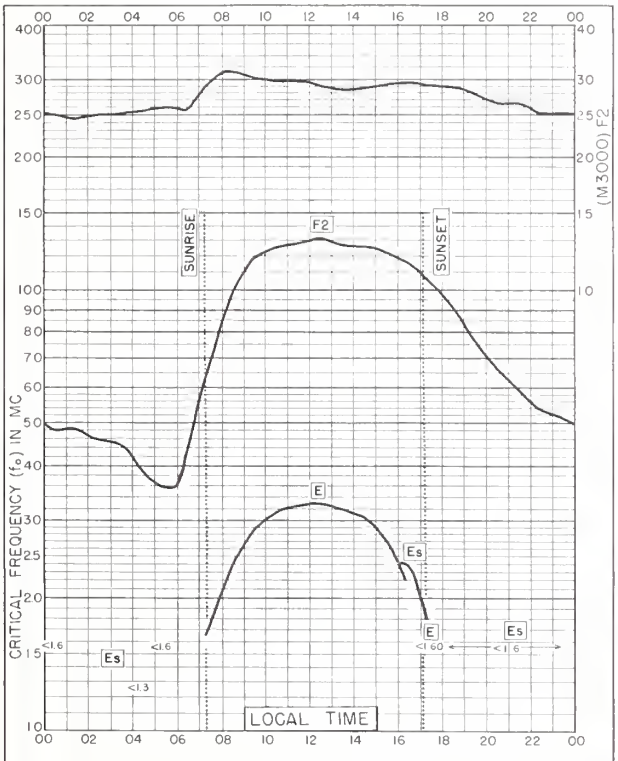


Fig. 91. DOURBES, BELGIUM
50.1°N, 4.6°E FEBRUARY 1959

NBS 503

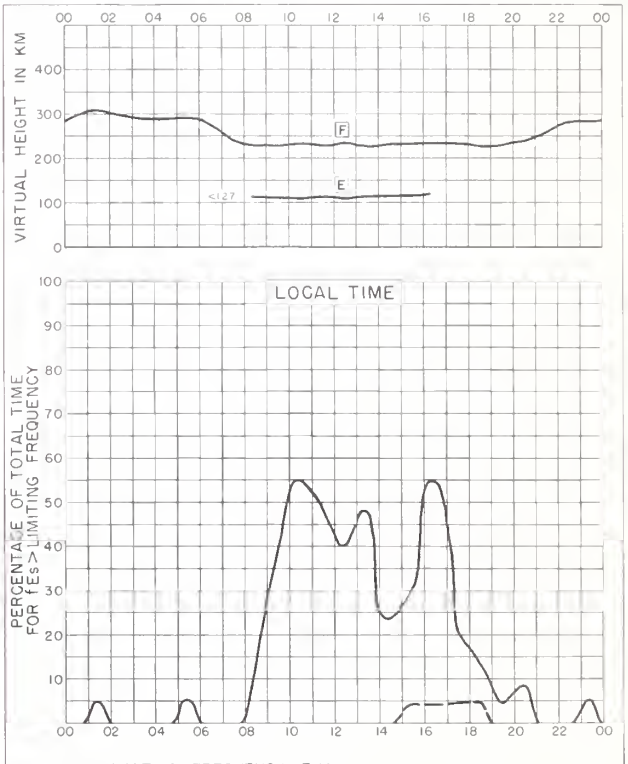


Fig. 92. DOURBES, BELGIUM FEBRUARY 1959

NBS 490

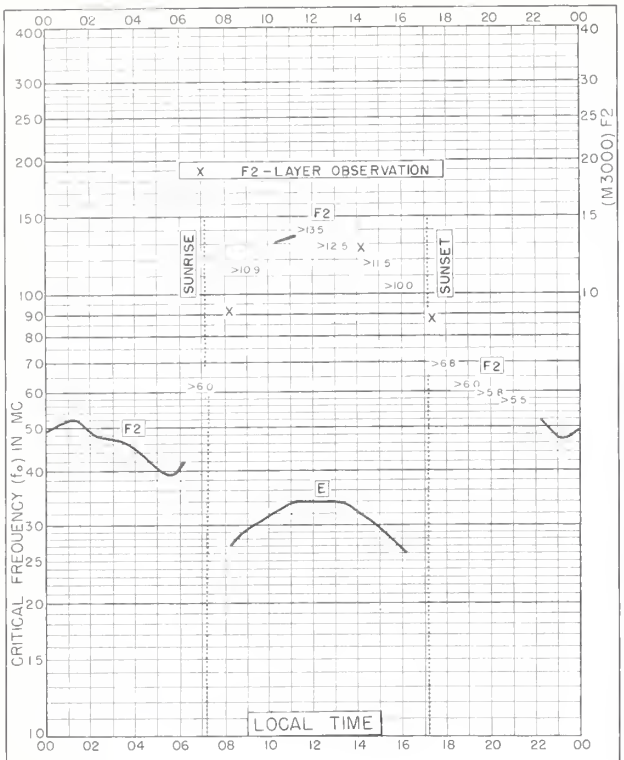


Fig. 93. BUDAPEST, HUNGARY
47.4°N, 19.2°E FEBRUARY 1959

NBS 503

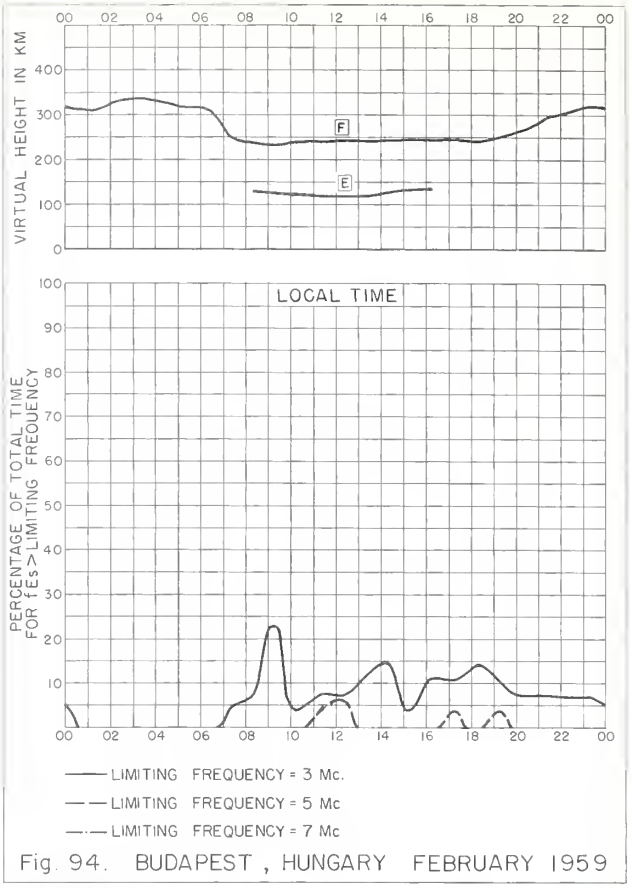


Fig. 94. BUDAPEST, HUNGARY FEBRUARY 1959

NBS 490

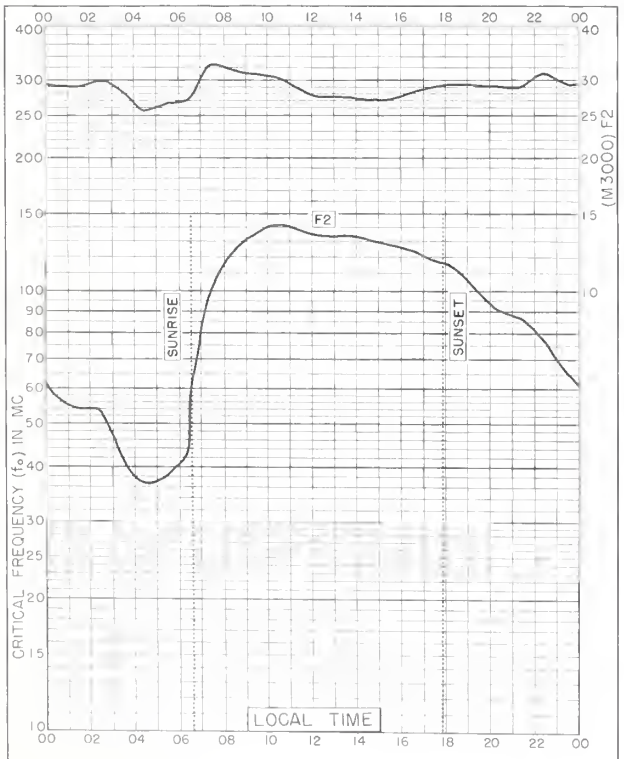


Fig. 95. EL CERILLO, MEXICO
19.3°N, 99.5°W FEBRUARY 1959

NBS 503

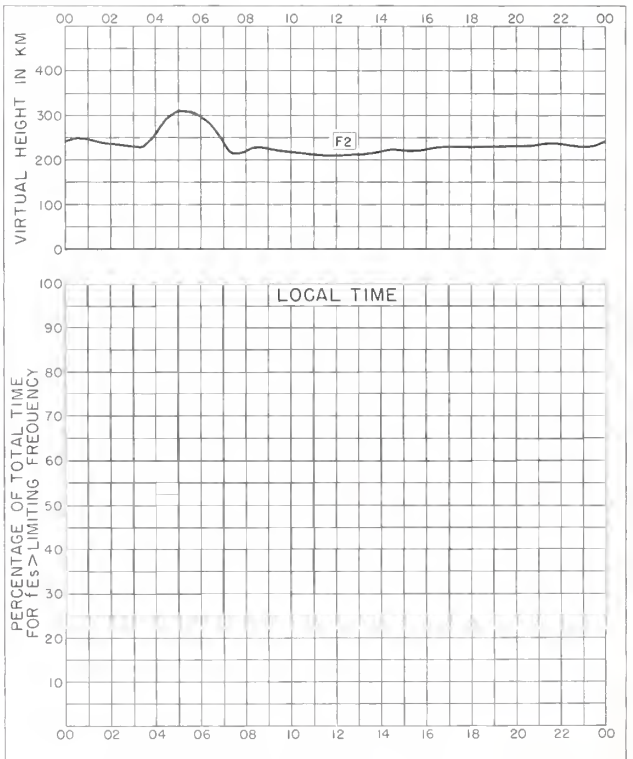


Fig. 96. EL CERILLO, MEXICO FEBRUARY 1959

NBS 490

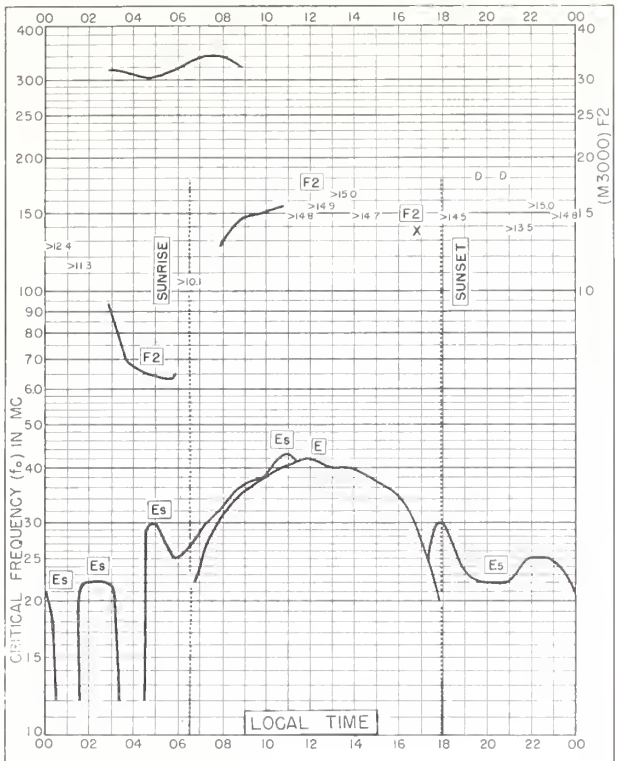
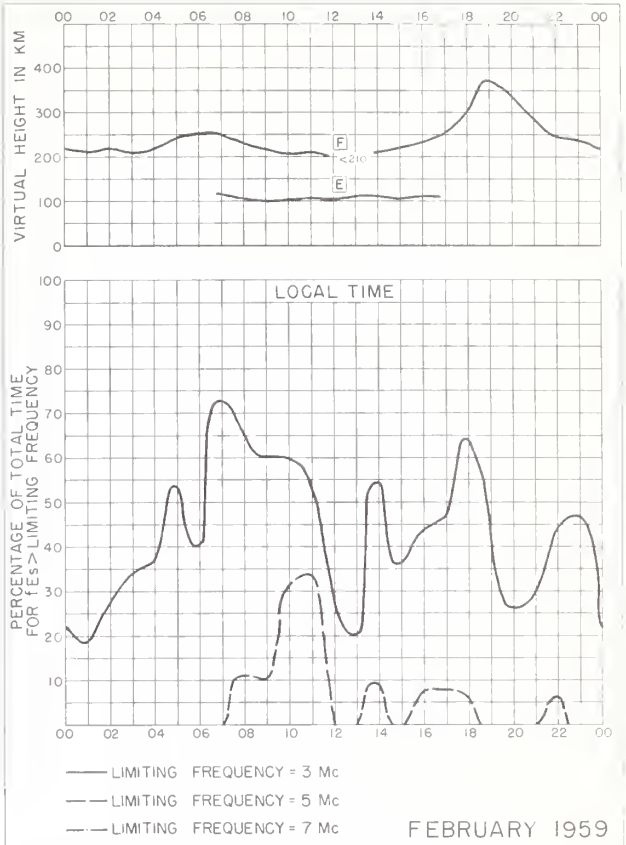


Fig. 97. DAKAR, FRENCH W. AFRICA
14.8°N, 17.4°W FEBRUARY 1959



FEBRUARY 1959

Fig. 98. DAKAR, FRENCH W. AFRICA

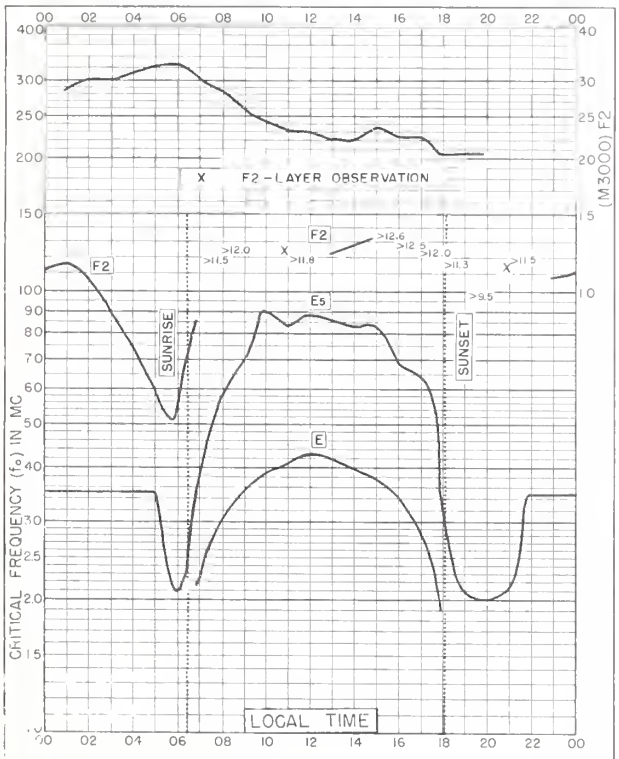


Fig. 99. DJIBOUTI, FRENCH SOMALILAND
11.6°N, 43.2°E FEBRUARY 1959

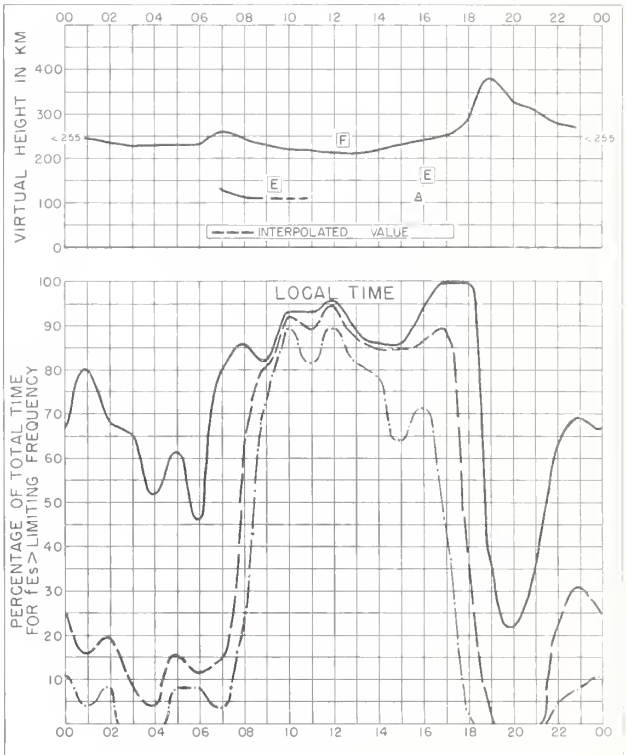


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Fig. 100. DJIBOUTI, FRENCH SOMALILAND

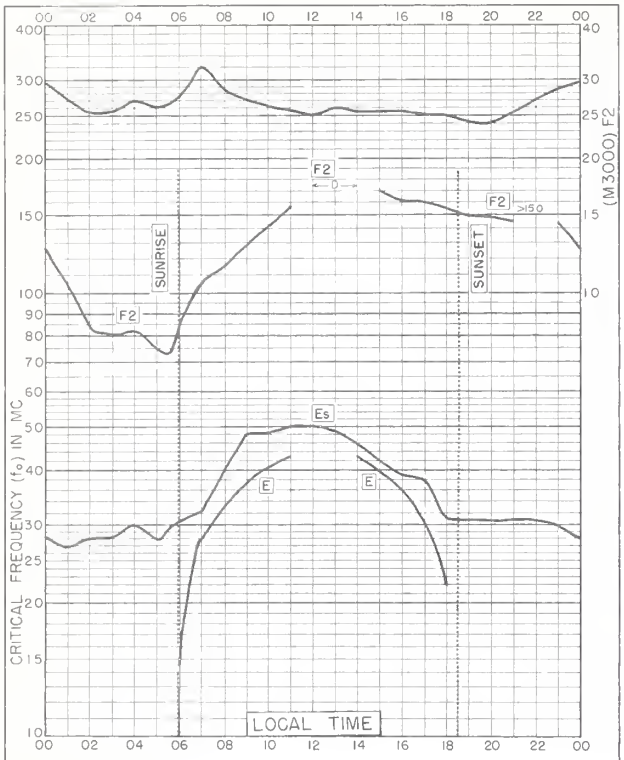

Fig. 101. TAHITI, SOCIETY IS.
17.7°S, 149.3°W FEBRUARY 1959

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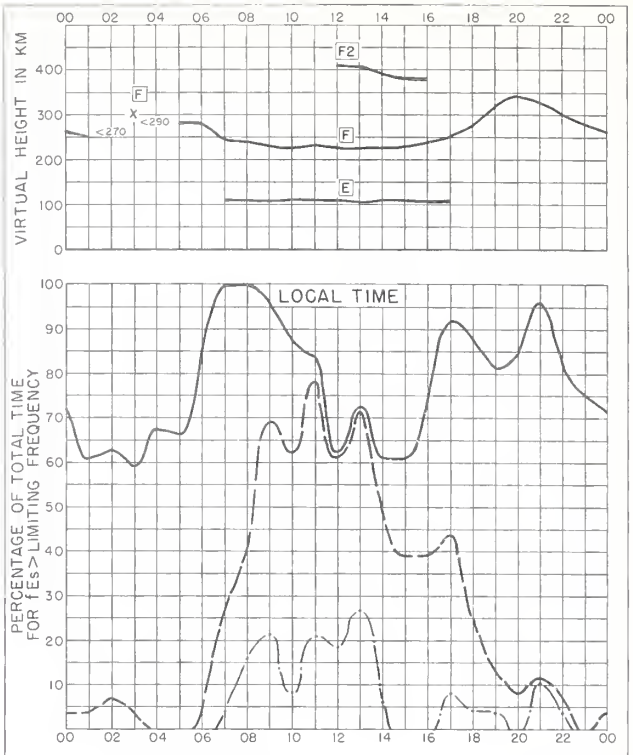

Fig. 102. TAHITI, SOCIETY IS. FEBRUARY 1959

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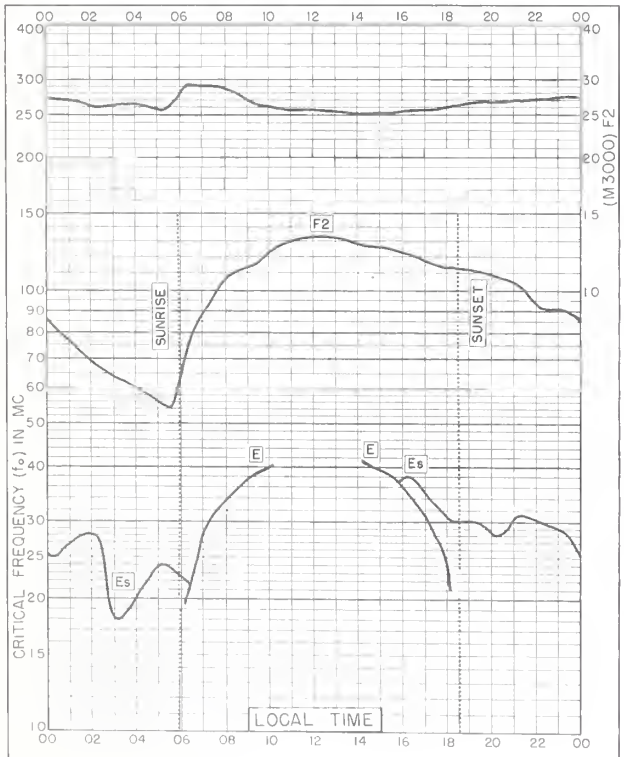

Fig. 103. TANANARIVE, MADAGASCAR
18.8°S, 47.5°E FEBRUARY 1959

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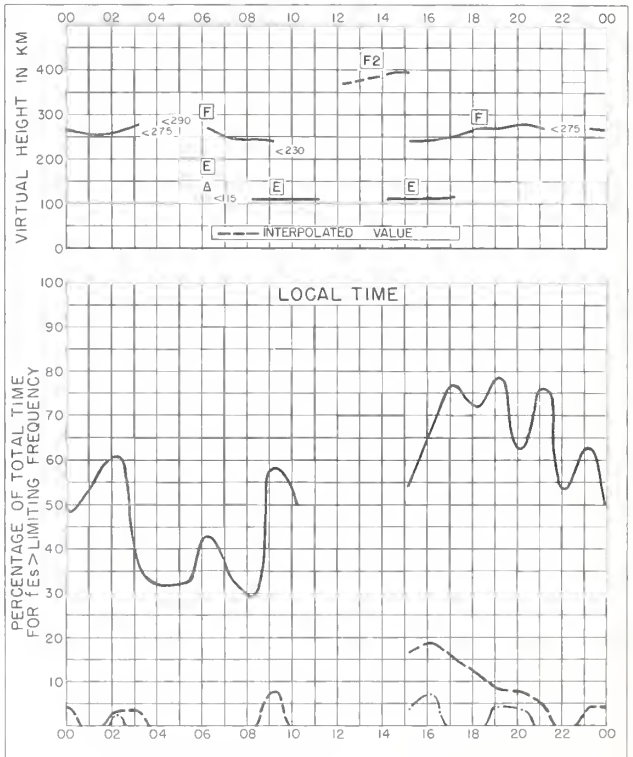

Fig. 104. TANANARIVE, MADAGASCAR FEBRUARY 1959

NBS 490

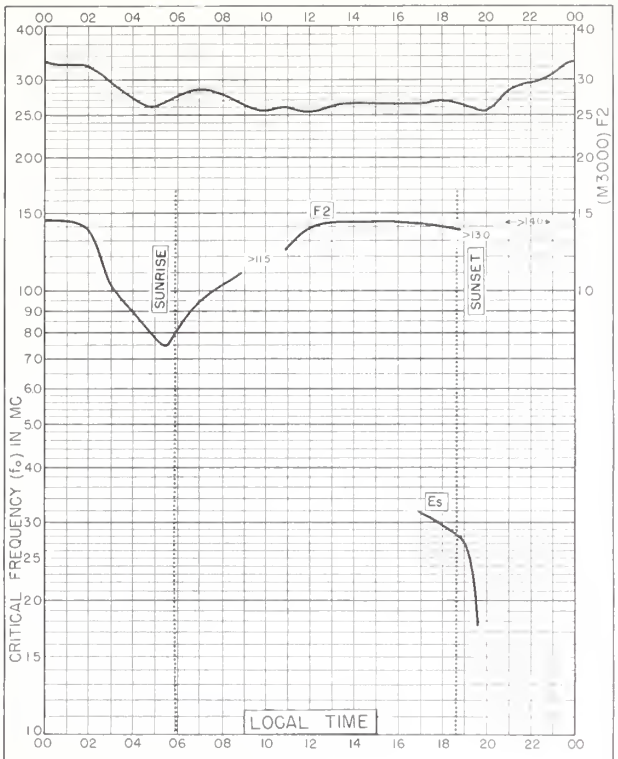

Fig. 105. SAO PAULO, BRAZIL
23.5°S, 46.5°W FEBRUARY 1959

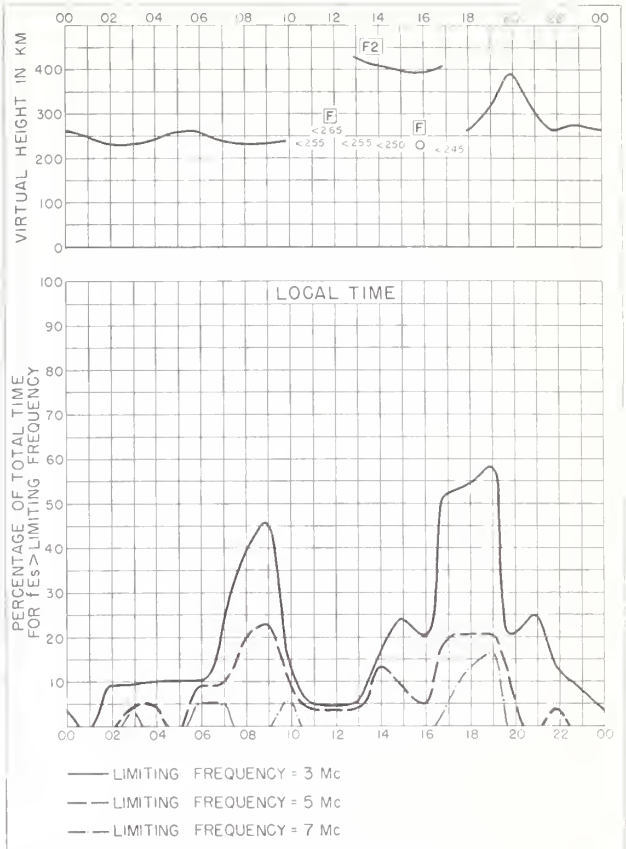

Fig. 106. SAO PAULO, BRAZIL FEBRUARY 1959

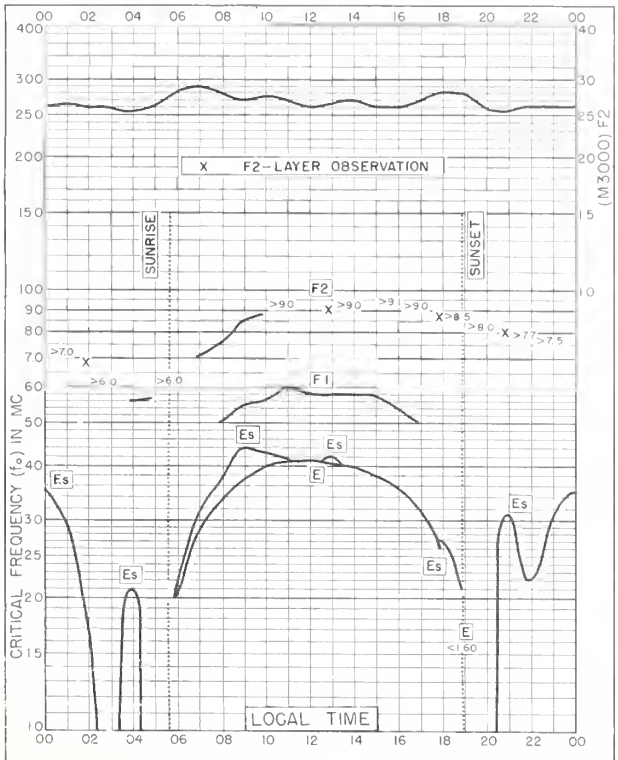

Fig. 107. CANBERRA, AUSTRALIA
35.3°S, 149.0°E FEBRUARY 1959

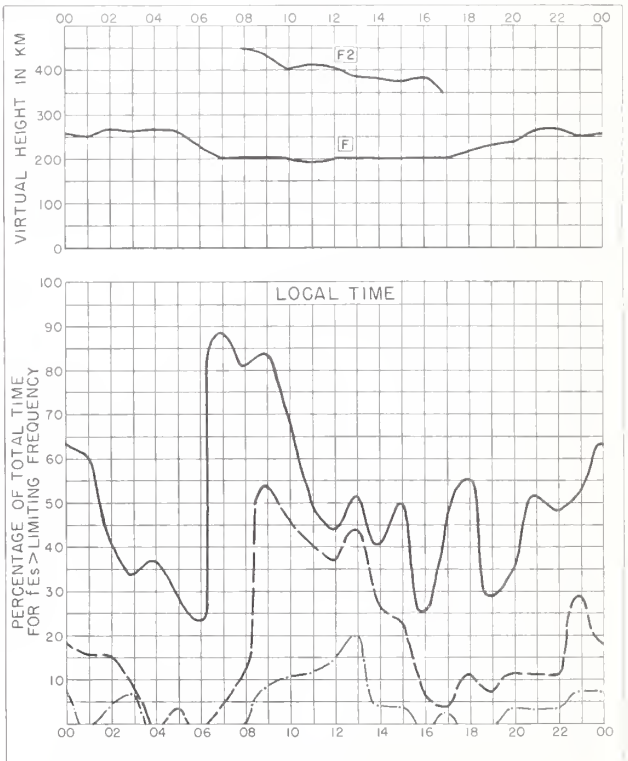

Fig. 108. CANBERRA, AUSTRALIA FEBRUARY 1959

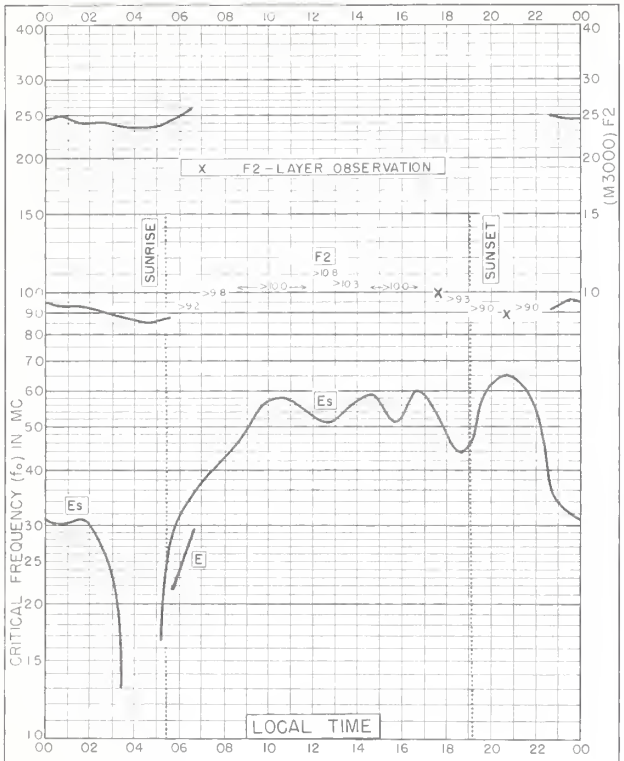

Fig. 109. TRELEW, ARGENTINA
43.2°S, 65.3°W FEBRUARY 1959

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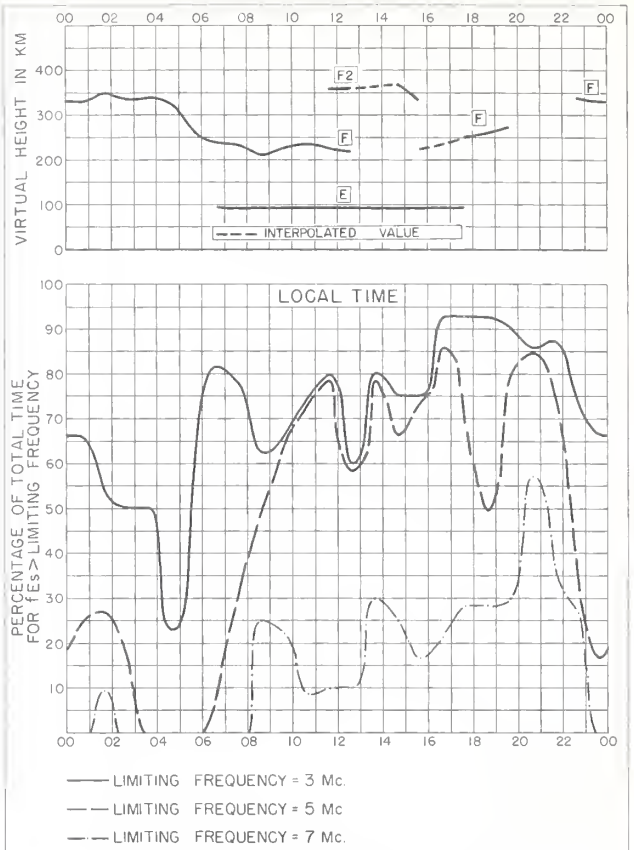

Fig. 110. TRELEW, ARGENTINA FEBRUARY 1959

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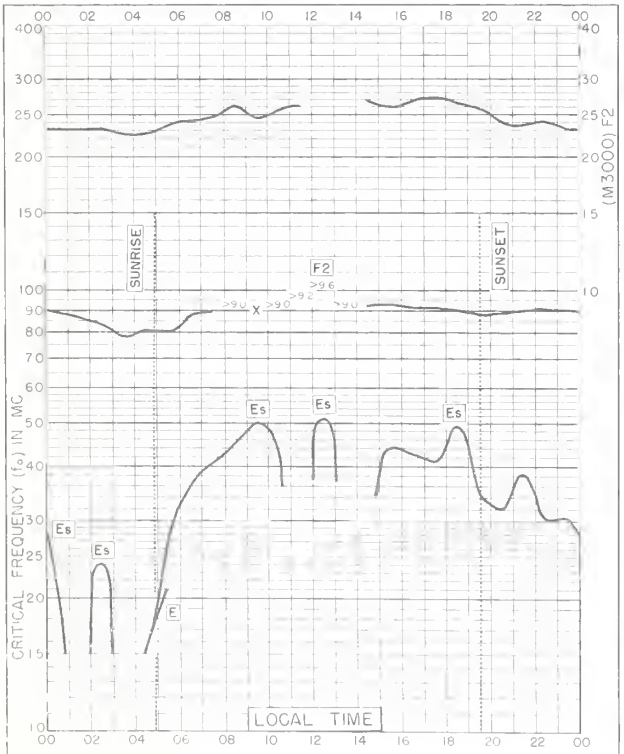

Fig. III. USHUAIA, ARGENTINA
54.8°S, 68.3°W FEBRUARY 1959

NBS 503

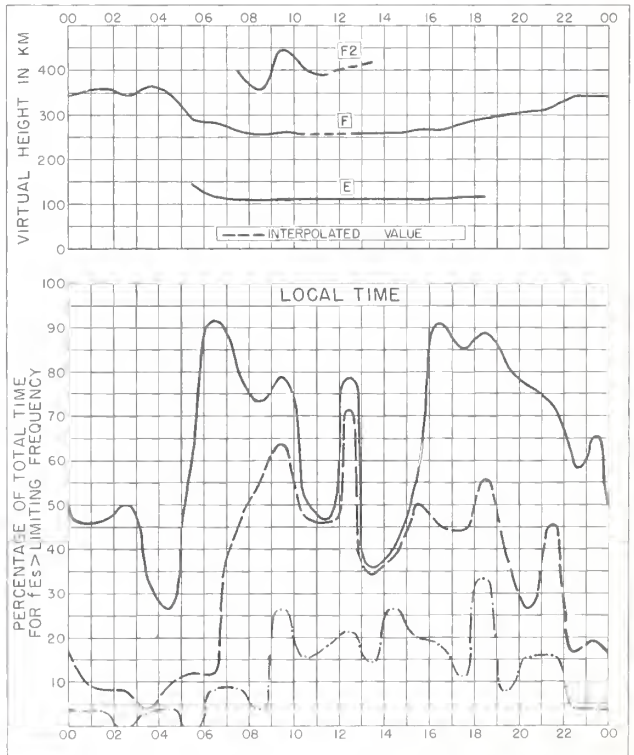

Fig. 112. USHUAIA, ARGENTINA FEBRUARY 1959

NBS 490

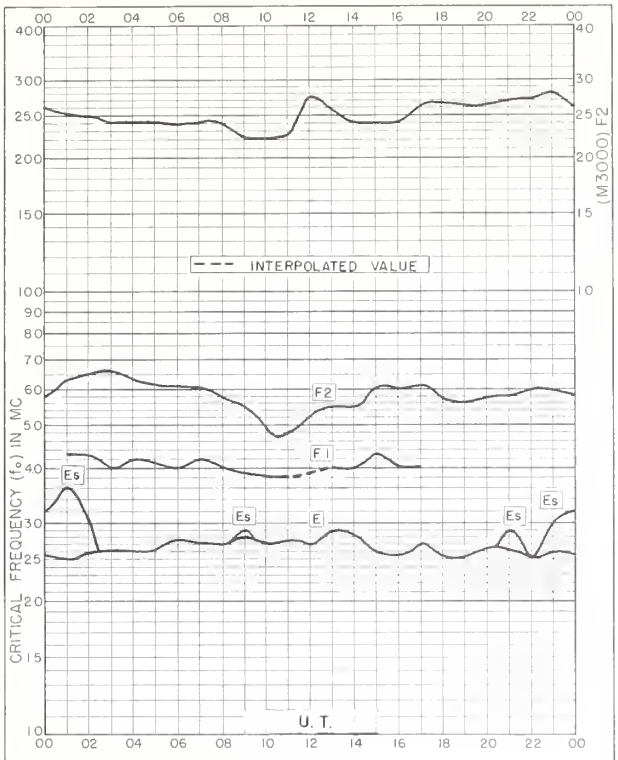

Fig 113. POLE STATION
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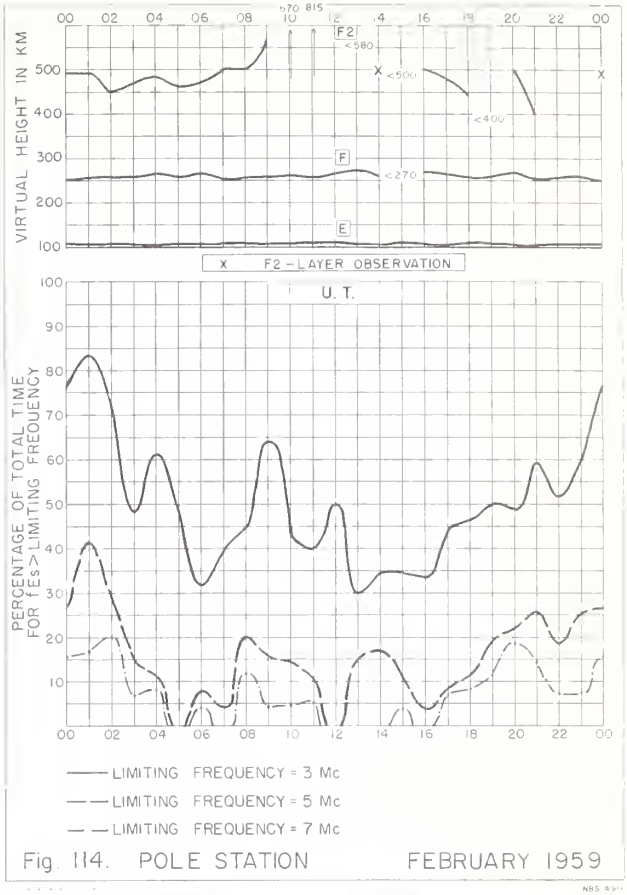
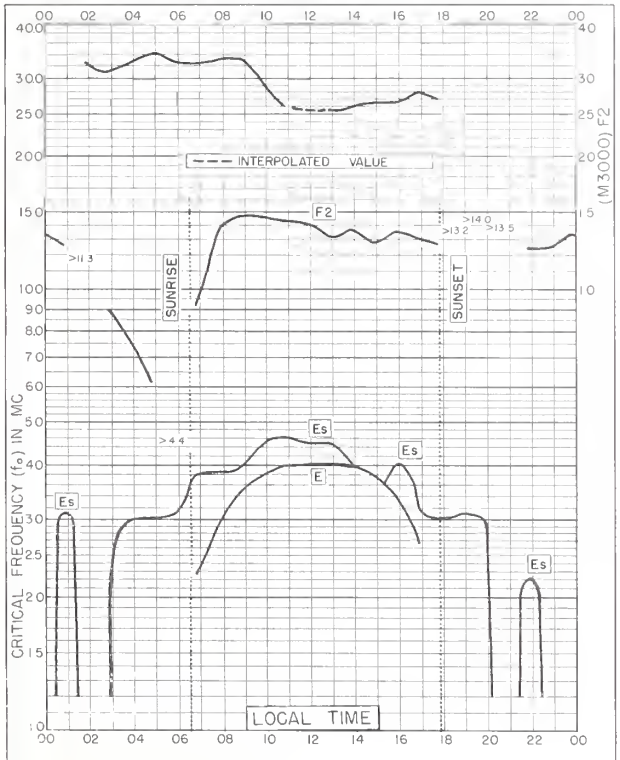


Fig. 114. POLE STATION FEBRUARY 1959



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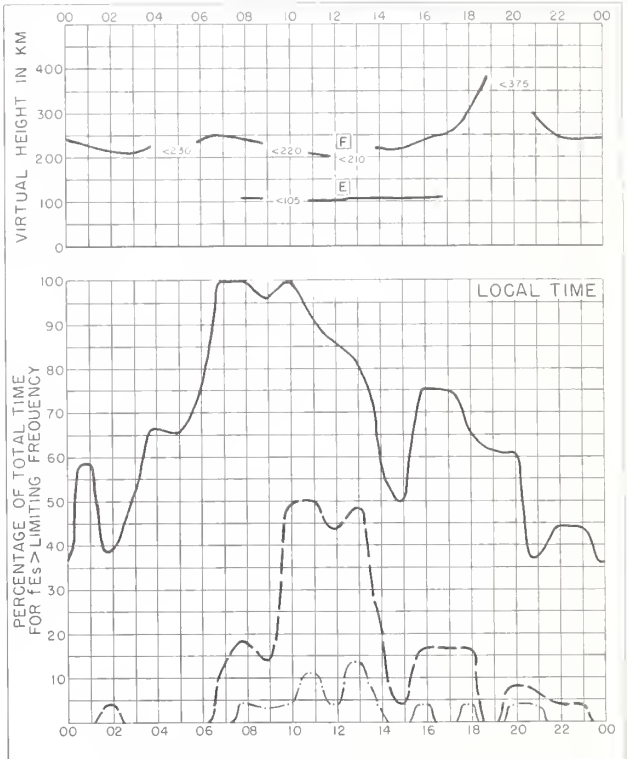

Fig. 116. DAKAR, FRENCH W. AFRICA JANUARY 1959

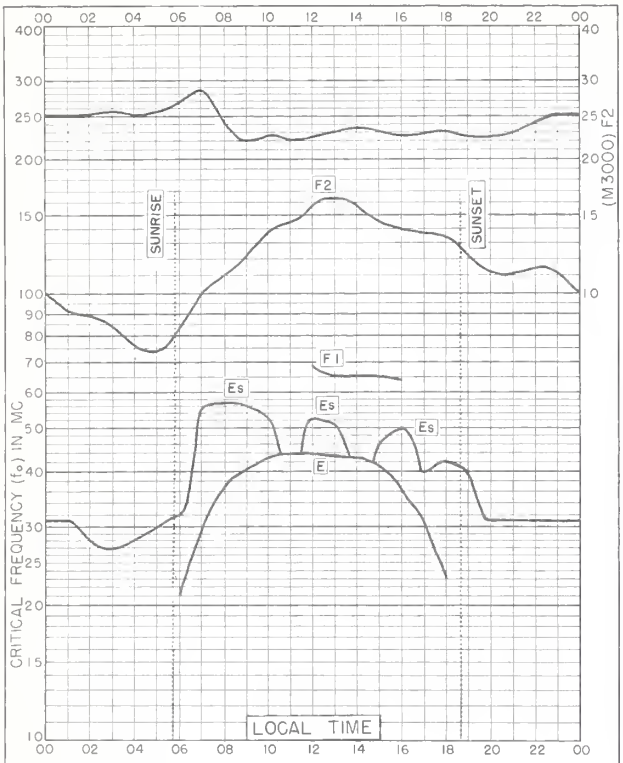

Fig. 117. TAHITI, SOCIETY IS.
17.7°S, 149.3° W JANUARY 1959

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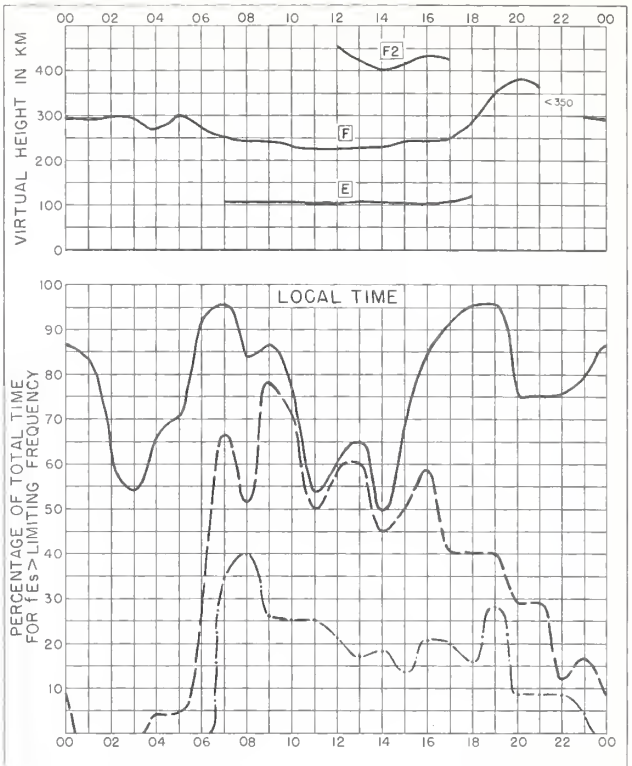

Fig. 118. TAHITI, SOCIETY IS. JANUARY 1959

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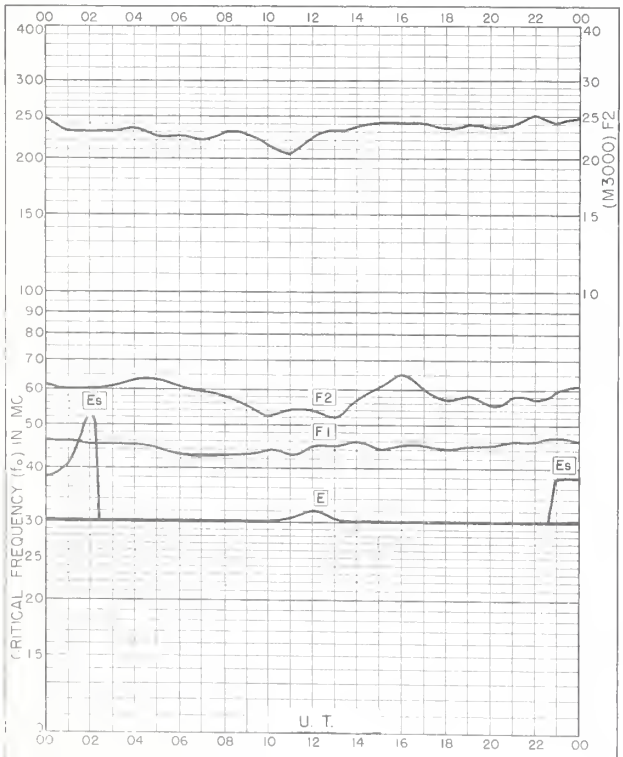

Fig. 119. POLE STATION
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NBS 503

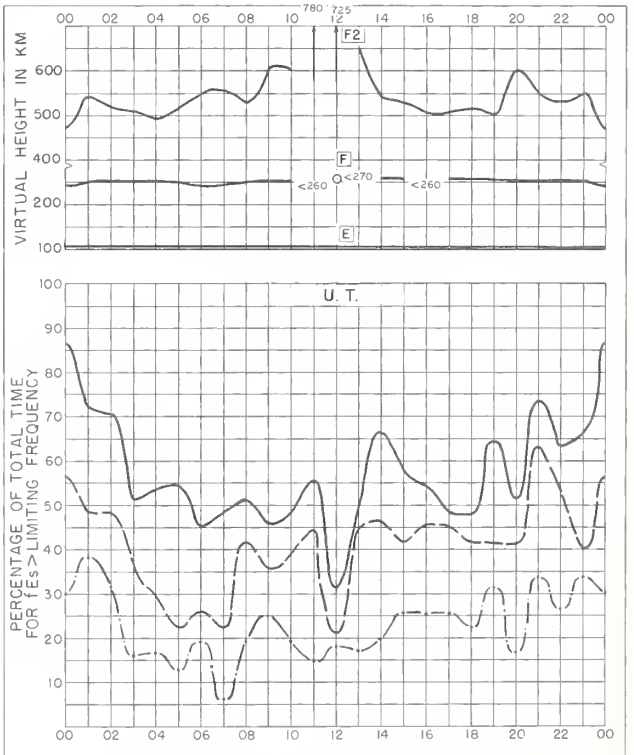

Fig. 120. POLE SATION JANUARY 1959

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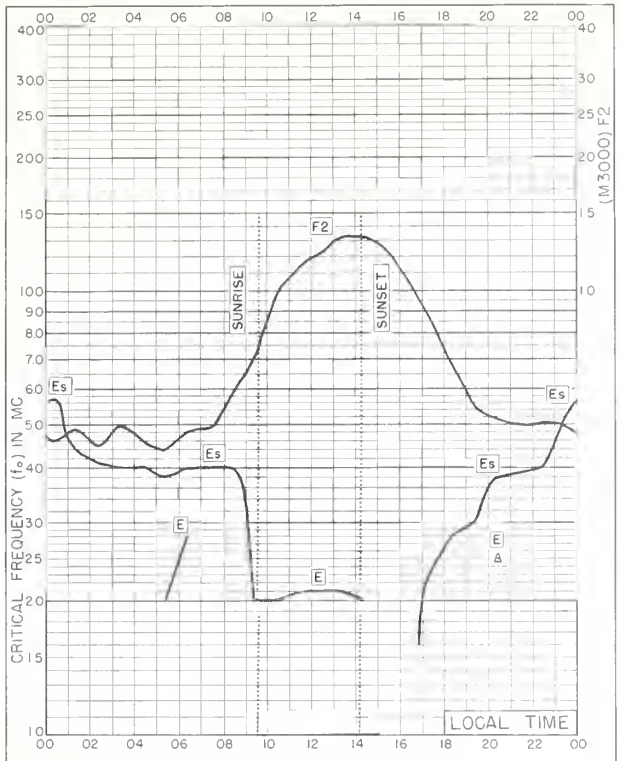

Fig. 121. YELLOWKNIFE, CANADA
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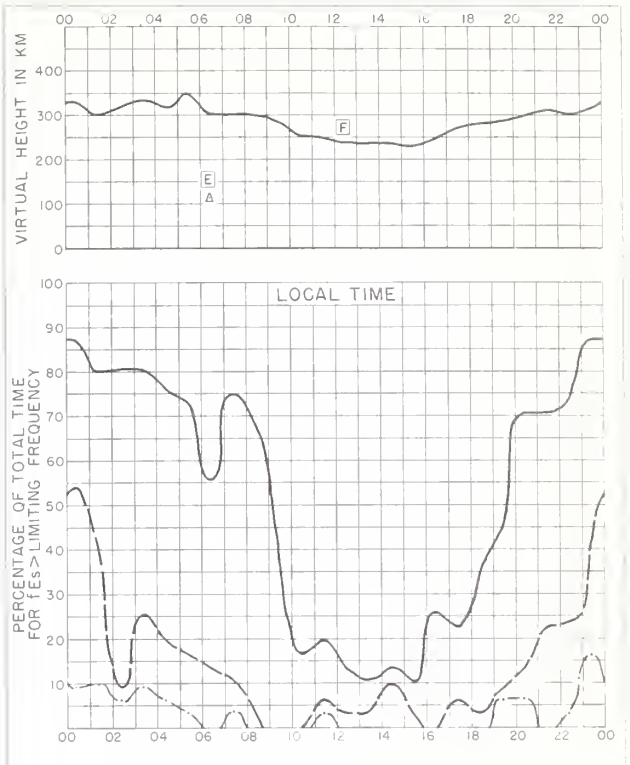

DECEMBER 1958

Fig. 122. YELLOWKNIFE, CANADA

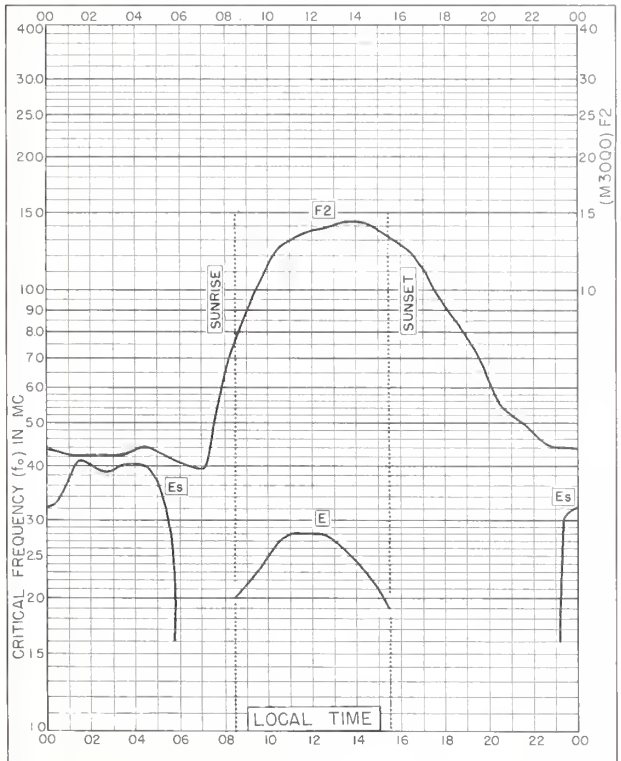

Fig. 123. MEANOOK, CANADA
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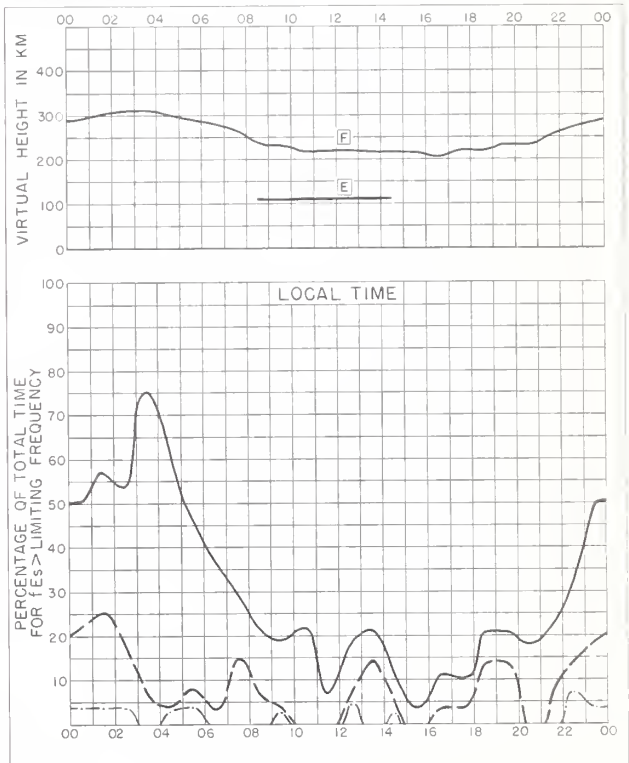

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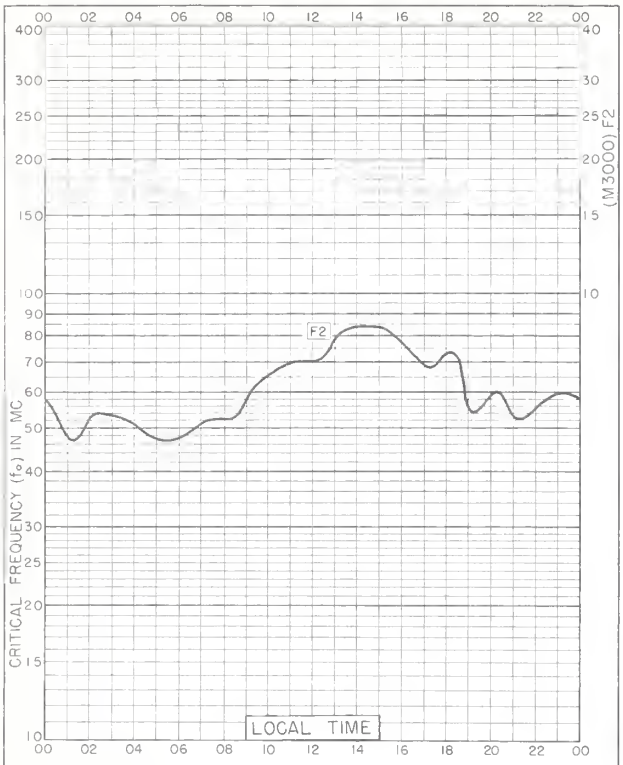

Fig. 125. EUREKA, CANADA
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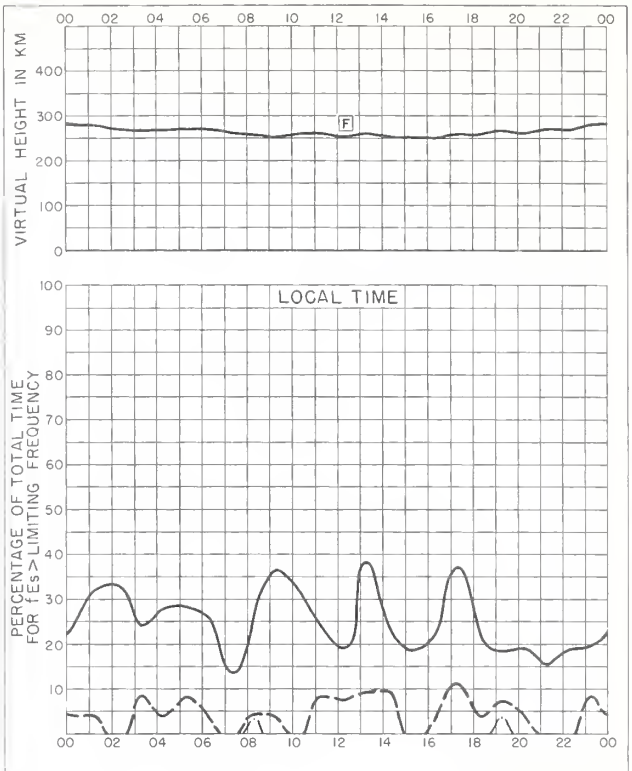

Fig. 126. EUREKA, CANADA FEBRUARY 1958

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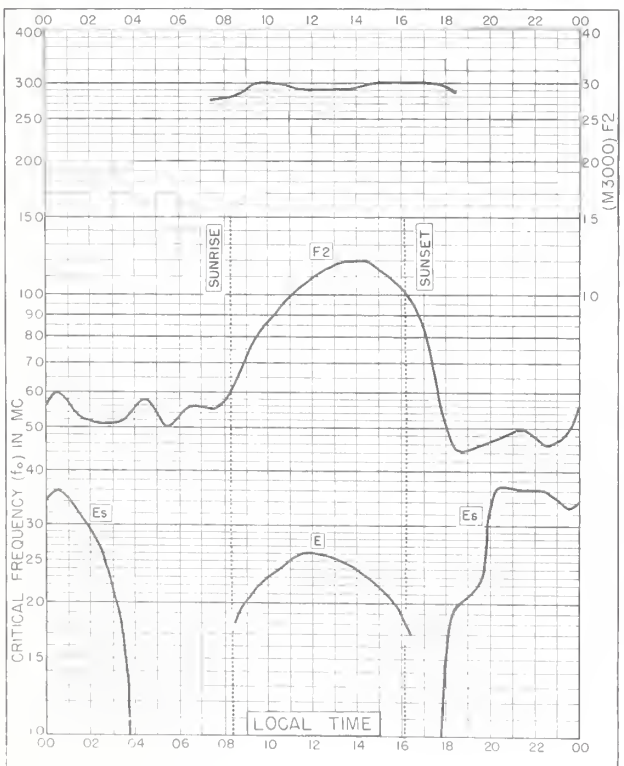

Fig. 127. LULEA, SWEDEN
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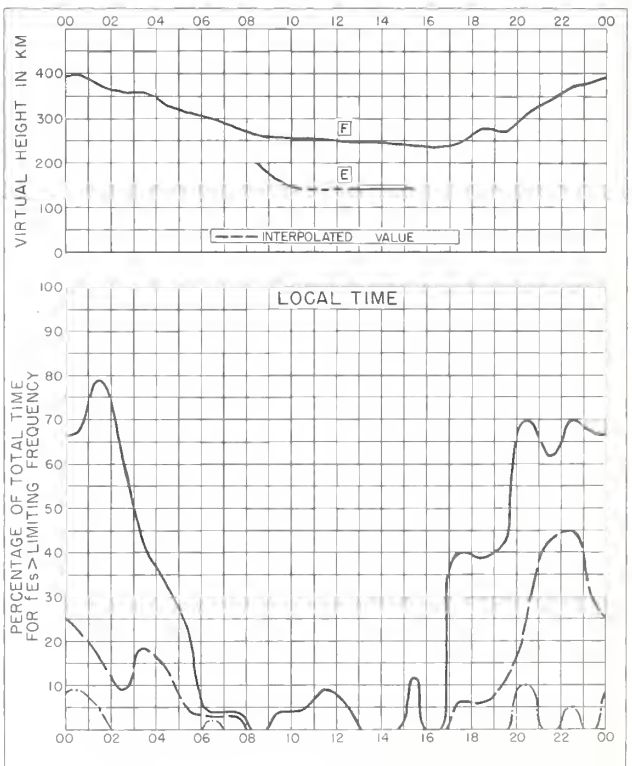

Fig. 128. LULEA, SWEDEN FEBRUARY 1958

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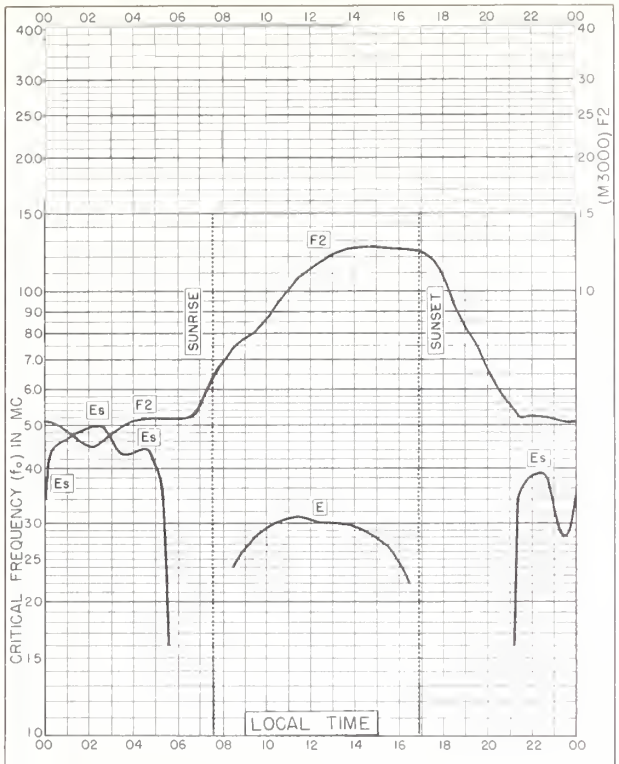


Fig. 129. MEANOOK, CANADA
54.6°N, 113.3° W FEBRUARY 1958

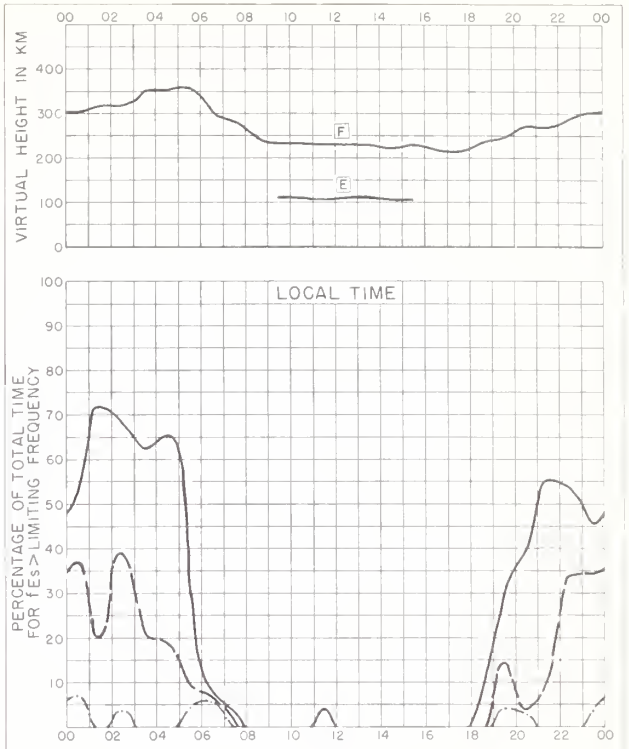
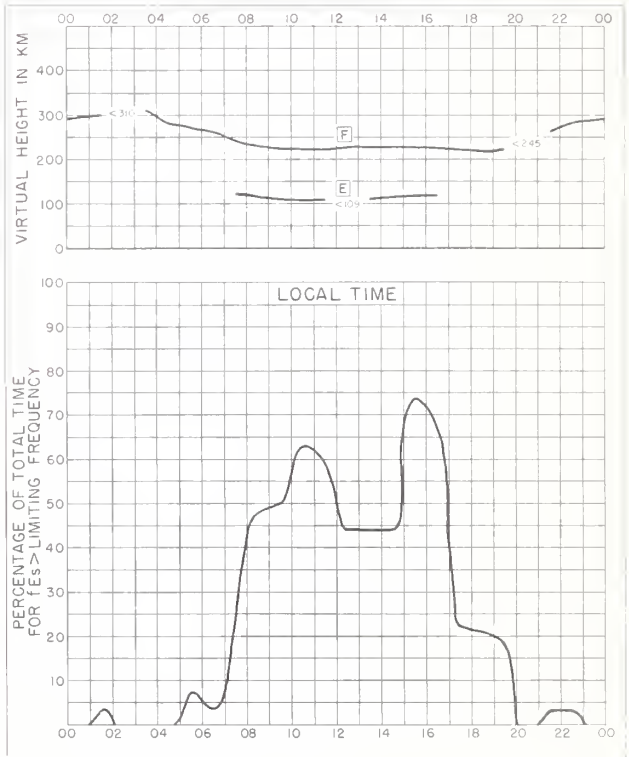


Fig. 130. MEANOOK, CANADA FEBRUARY 1958

Fig. 131. FREIBURG, GERMANY
48.1°N, 7.6°E FEBRUARY 1958



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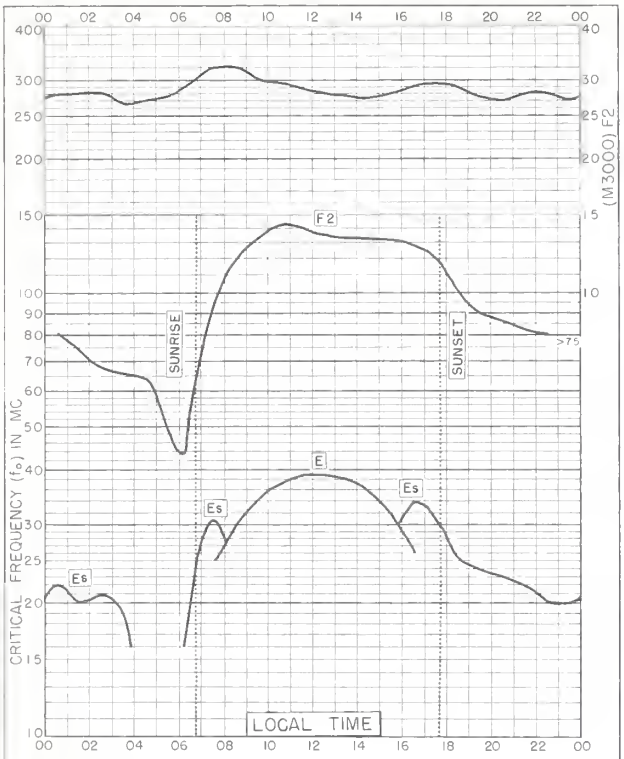

Fig. 133. RABAT, MOROCCO
30.9°N, 6.8°W FEBRUARY 1958

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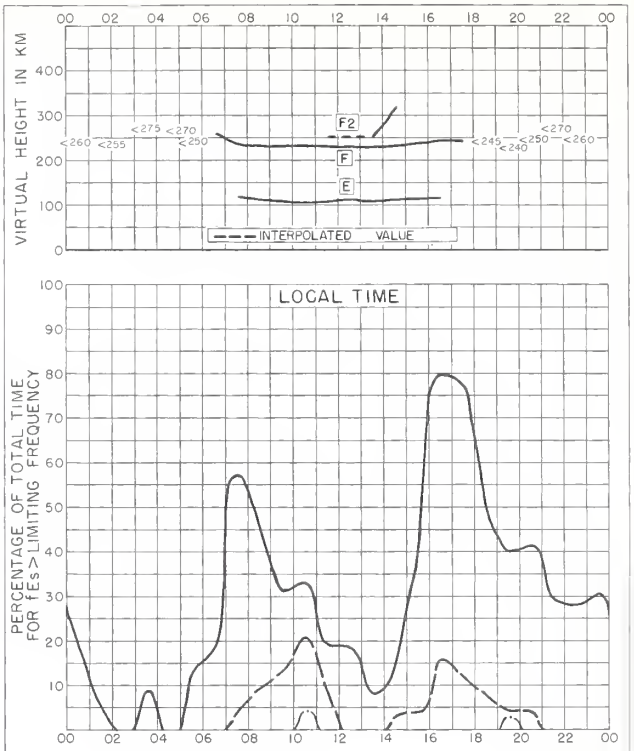

Fig. 134. RABAT, MOROCCO FEBRUARY 1958

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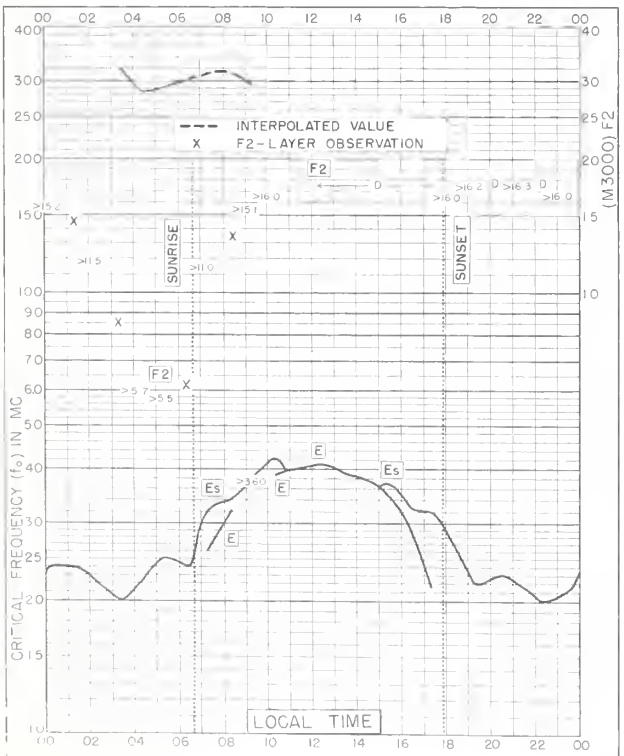

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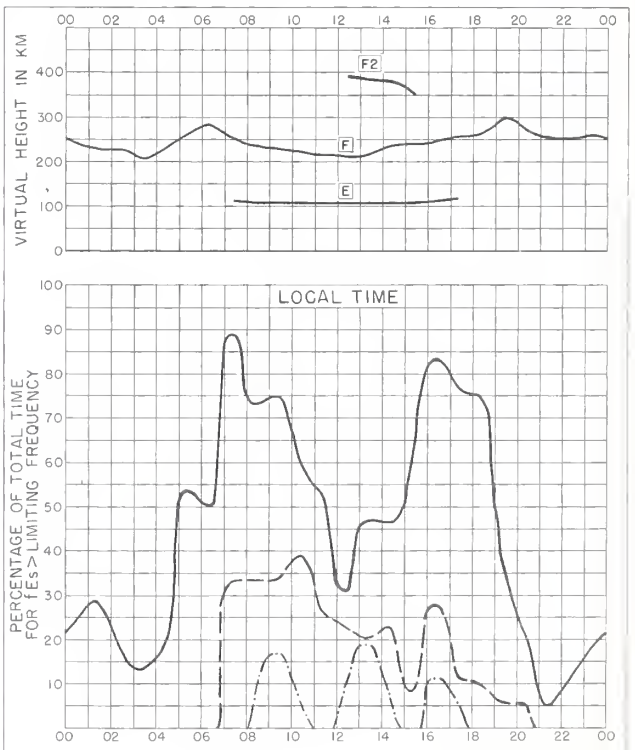

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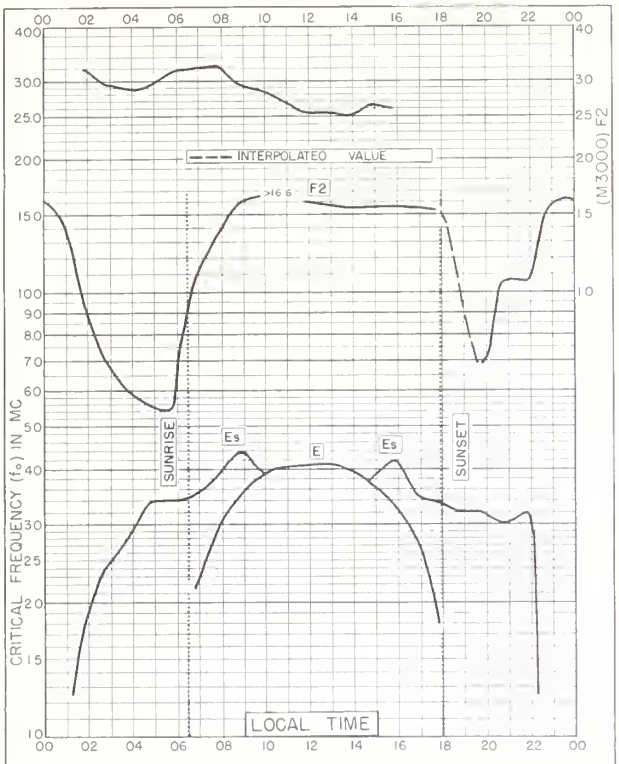

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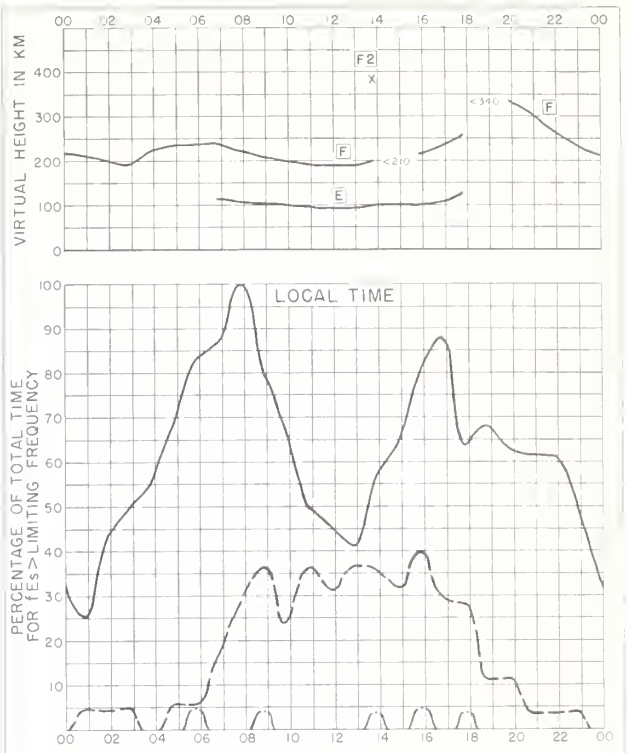

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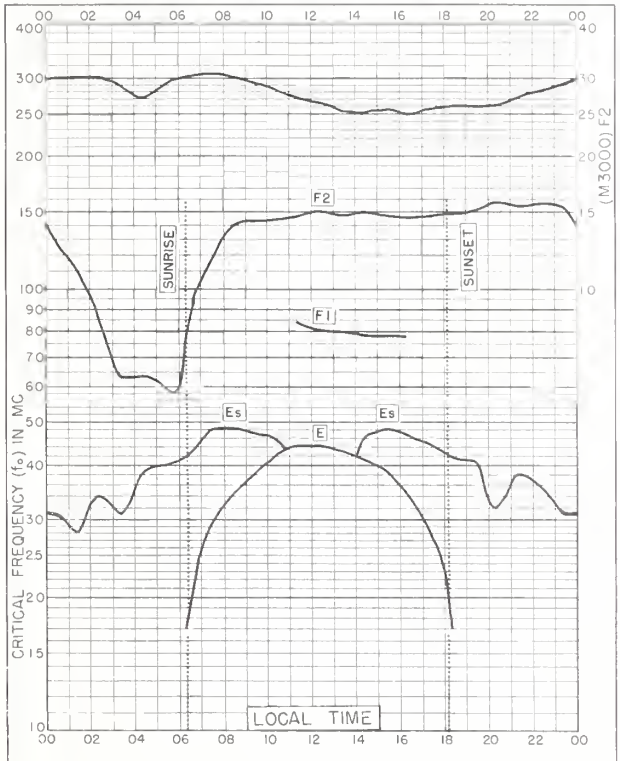

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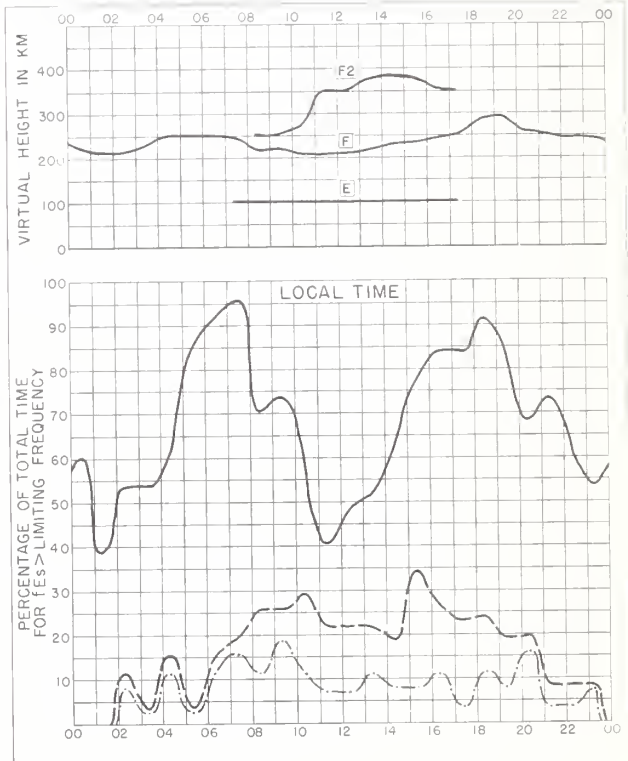

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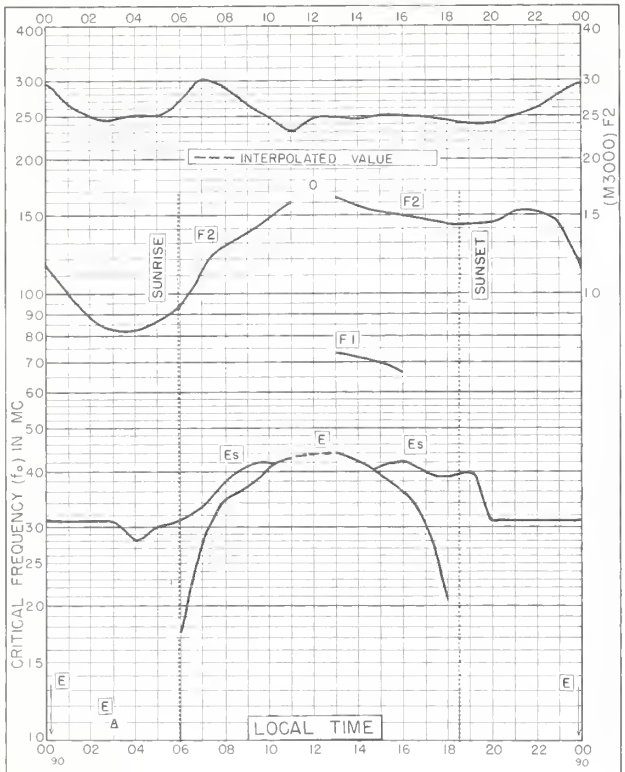

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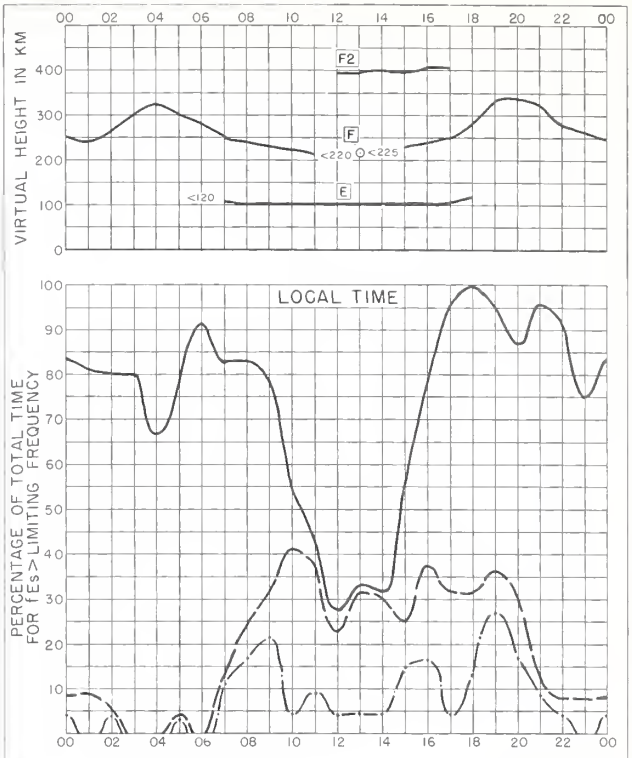

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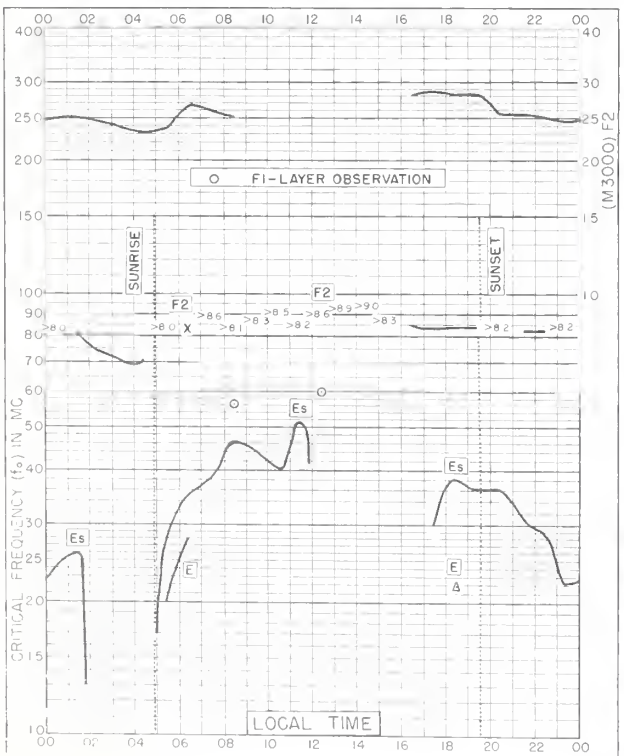

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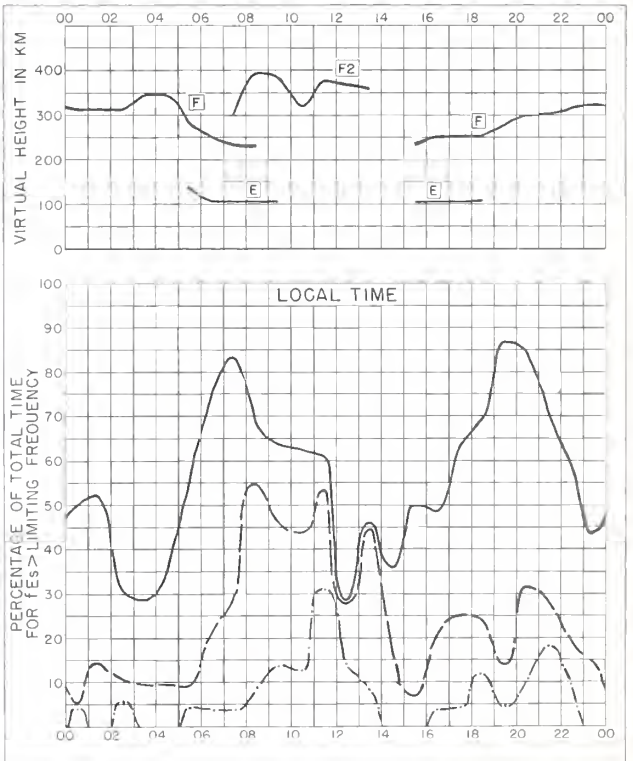

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[A detailed list of CRPL publications is available from the Central Radio Propagation Laboratory upon request]

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